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ABSTRACT

This report presents national summaries and state-by-state descriptions of the types and results of achievement information submitted by state educational agencies on the Education Consolidation and Improvement Act (ECIA) Chapter 1 Migrant Education Program for the 1987-88 school year. Thirty-six states (out of 49) provided statewide achievement information for the regular term, using various types of test results. Norm-referenced tests were used in 30 states, while nine states used criterion-referenced tests, and two states used locally-developed instruments. In the summer term, 17 states (out of 46) provided statewide achievement information. Although the format for presenting data varies, states provided data by school term, grade, subject area, and testing schedule. Appendix A presents the methodology used to review the 1987-88 State Performance Reports submitted by the states. Appendix B provides state-level tabular displays of achievement information, by grade, for those states reporting regular-term achievement results, expressed in normal curve equivalent scores, using a pretest-posttest norm-referenced model. Appendix C provides a brief description of norm- and criterion-referenced testing. This report contains numerous tables and figures. (KS)

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A SUMMARY OF STATE CHAPTER 1 MIGRANT EDUCATION PROGRAM PARTICIPATION AND ACHIEVEMENT INFORMATION

1987-88

VOLUME 2: ACHIEVEMENT

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A SUMMARY OF STATE CHAPTER 1 MIGRANT EDUCATION PROGRAM PARTICIPATION AND ACHIEVEMENT INFORMATION

1987-88

VOLUME 2: ACHIEVEMENT

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U.S. Department of Education

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A SUMMARY OF STATE CHAPTER 1 MIGRANT EDUCATION PROGRAM PARTICIPATION AND ACHIEVEMENT INFORMATION FOR 1987-88

EXECUTIVE SUMMARY

This report encompasses two volumes and summarizes the participation and achievement information provided by state educational agencies (SEAs) on the ECIA Chapter 1 Migrant Education Program for the 1987-88 school year. The 1987-88 school year was the fourth year in which SEAs were required to submit participation information using a prescribed format (the State Performance Report).[1] For achievement information, statewide data summaries were requested, although no specific format was required.

Volume 1 provides the participation information, while this volume presents state-by-state descriptions of the types and results of the achievement information submitted by SEAs.

Thirty-six states (out of 49) provided statewide achievement information for the regular term,[2] using various types of tests. Norm referenced tests were used in 30 states, while nine states used criterion referenced tests, and two states used locally-developed instruments. In the summer term, 17 states (out of 46) provided statewide achievement information.[3] Summer term achievement testing was distributed among norm referenced tests (seven states), criterion referenced tests (10 states), and locally-developed instruments (three states).

Several factors affect the assessment of achievement outcomes in migrant education projects. Among the most important factors are:

- Since there were no standardized reporting requirements, states provided information from a variety of test types (such as norm referenced, criterion referenced, and locally-developed), using a range of test measures (such as normal curve equivalents, grade equivalents, number of objectives mastered, and number of skills mastered);

- Currently migrant students were typically the least likely to be part of project evaluation testing (especially testing with a pre/post design) because of their mobility and their language deficits;

- Standardized tests, with norms for fall and/or spring testing, may not be compatible with the short term basis of many migrant projects or the cyclical patterns of migrant movement; and

---

[1]In 1987-88, State Performance Reports were received from 49 states, the District of Columbia, and Puerto Rico. Hawaii does not participate in the migrant education program.

[2]Montana and Nebraska did not operate migrant education projects in the regular term.

[3]Iowa, Louisiana, Mississippi, Oklahoma, and Puerto Rico did not operate migrant education projects in the summer term.

- Most states submitted results for participants tested in reading and mathematics. However, projects funded by the Chapter 1 migrant education program tended to be highly diversified. Therefore, evaluations of performance in these two subject areas may be inappropriate or inadequate measures of the impact of the services provided.

While these factors preclude the development of a national estimate of the achievement of migrant education participants, summary findings are presented in this report for those states reporting regular term achievement results, expressed in normal curve equivalent scores (NCEs), using a pretest/posttest norm referenced model. This achievement information was reported for about 42,000 Chapter 1 migrant students in 19 states tested on an annual test cycle in reading and slightly over 28,000 tested in mathematics. Over 3,500 Chapter 1 migrant students in 11 states were reported tested on a fall-spring test cycle in reading and, in 12 states, almost 3,000 were reported in mathematics. The majority of students tested were in the elementary grades.

Children of migrant workers traditionally have been regarded as one of the most educationally disadvantaged segments of the school-aged population. Over 40 percent of the summary pretest percentiles fell at or below the 25th percentile. In both the annual and fall-spring cycles, summary pretest percentiles were higher in mathematics than in reading. On average, pretest percentiles were higher at the elementary level than at the secondary level.

Participants tested on a fall-spring cycle demonstrated higher NCE gains than students tested on an annual cycle. Summary NCE gains within test cycles tended to be higher in mathematics than in reading.

For the Chapter 1 migrant students tested on an annual test cycle in reading, the total summary gains ranged from -1.1 NCEs in grade 12 to 2.0 NCEs in grade 4. The total summary pretest percentiles ranged from the 15th percentile in grade 9 to the 29th percentile in grade 2.

In mathematics, for migrant education participants tested on an annual test cycle, the total summary NCE gains ranged from no gain in grade 8 to 3.6 NCEs in grade 5. The total summary pretest percentiles ranged from the 27th percentile in grade 9 to the 41st percentile in grades 2 and 3.

For the Chapter 1 migrant students tested on a fall-spring test cycle in reading, the total summary gains ranged from 4.0 NCEs in grade 10 to 11.4 NCEs in grade 2. The total summary pretest percentiles ranged from the 20th percentile in grade 3 to the 44th percentile in grade 12.

In mathematics, for migrant education participants tested on a fall-spring test cycle, the total summary gains ranged from 1.9 NCEs in grade 10 to 13.6 NCEs in grade 12. The total summary pretest percentiles ranged from the 23rd percentile in grades 5 and 12 to the 51st percentile in grade 11.

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INTRODUCTION

Recognizing that the migratory children of migratory agricultural workers were disadvantaged, P.L. 89-750 was enacted in November 1966, amending Title I of the Elementary and Secondary Education Act (ESEA) to authorize a program of services for these youths. The 1987-88 migrant education program, authorized by Section 554(a) of Chapter 1 of the Education Consolidation and Improvement Act (ECIA), and Sections 141-143 of Title I of the Elementary and Secondary Education Act of 1965, as amended by the Education Amendments of 1978 (P.L. 95-561), provided funds to state educational agencies (SEAs) for "programs and projects...which are designed to meet the special educational needs of migratory children of migratory agricultural workers or of migratory fishermen, and to coordinate such programs and projects with similar programs and projects in other states, including the transmittal of pertinent information with respect to school records of such children" (Section 142).

Overview

Sections 555(d) and (e) of Chapter 1, respectively, specify SEA responsibilities for (1) maintaining records and information, and (2) conducting evaluations and collecting data. These sections state:

> (d) Records and information: Each State educational agency shall keep such records and provide such information to the Secretary as may be required for fiscal audit and program evaluation (consistent with the responsibilities of the Secretary under this chapter).
>
> (e) Evaluation: Each State educational agency shall-
>
> (1) conduct an evaluation of the programs assisted under this chapter at least every two years and shall make public the results of that evaluation; and
>
> (2) collect data on the race, age, and gender of children served by the programs assisted under this chapter and on the number of children served by grade-level under the programs assisted under this chapter.

While these requirements obligated SEAs to report data to the Federal government, the U.S. Department of Education (ED) did not initially specify the format nor provide guidelines for the information to be collected. As a result, states developed their own locally relevant criteria for collecting participation information.

In 1983, however, the ED General Counsel determined that all SEAs were required by the Chapter 1 statute to submit standardized information on the migrant education program to ED. To implement this decision, ED solicited input from SEAs on the most appropriate measures and assembled a standard format for reporting of the participation information. The resulting standard form (the State Performance Report) received final approval by the Office of Management and Budget (OMB) in the spring of 1985. The 1984-85 school year was the first year of data collection using this form.

Further, ED published rules and regulations pertaining to these requirements on May 19, 1986. In reference to the evaluation requirement, the Department stated:

> §204.23 Evaluation.
>
> (a) SEA evaluation.
>
> (1) Each SEA shall-

(i) Conduct an evaluation of the Chapter 1 programs in the State at least once every two years and make public the results of that evaluation; and

(ii) Collect data annually on-

(A) The race, age, and gender of children served by the Chapter 1 programs in the State; and

(B) The number of children served by grade level under the Chapter 1 programs in the State.

(2) To meet the requirements in paragraph (a)(1)(i) of this section, the SEA may, for each Chapter 1 program, aggregate evaluation data collected under paragraph (b)(1)(i) of this section to obtain Statewide totals.

Paragraph L(b)(1)(i) required the SEA, as part of its program evaluation, to include "objective measurements of educational achievement in basic skills."

This report summarizes the 1987-88 State Performance Reports for the ECIA Chapter 1 Migrant Education Program.[1] The information for the 1987-88 school year was submitted by the SEAs in the winter and early spring of 1989. These performance reports provide information on the number of participants (by gender, year of birth, ethnic group, migrant status, and grade by regular term/summer term), the types of services provided (by regular term/summer term), the number of staff (by regular term/summer term), and achievement (by regular term/summer term). The participation information, collected and reported according to the prescribed format, is presented in Volume 1.

For achievement, statewide data summaries were requested, and any format desired by the SEA could be used. This volume provides a description of the achievement information submitted by the SEAs for the 1987-88 school year. Although no specific format was prescribed, states were encouraged to provide data by school term, grade, subject area, and testing schedule.

Organization

The remainder of this volume provides a summary of achievement information reported by the states, followed by state-by-state descriptions of the types and results of the achievement information reported by each state. In Appendix A, the methodology used to review the 1987-88 State Performance Reports submitted by the states is presented. Appendix B presents state-level tabular displays of achievement information, by grade, for those states reporting regular term achievement results, expressed in normal curve equivalent scores, using a pretest/posttest norm-referenced model. Appendix C provides a brief description of norm- and criterion-referenced testing.

---

[1]In 1987-88, State Performance Reports were received from 49 states, the District of Columbia, and Puerto Rico. Hawaii does not participate in the migrant education program.

Summary of Achievement Information Reported by the States[2]

Regular Term Reports

Thirty-six states (out of 49) provided statewide achievement information in the regular term.[3] The most prevalent subject areas for which information was reported were reading and mathematics (in 35 of the 36 states). In addition, achievement information in the other language arts area was provided by 21 states, and four states reported achievement information on English to limited English background students. (Table 1)

The states used various types of tests. Norm referenced tests were the most frequently used: results from norm referenced tests were reported in 30 states. Nine states used criterion referenced tests, and two states used locally-developed instruments. (Table 2)

Twenty-seven states provided information on the number of Chapter 1 migrant education participants tested using norm referenced measures. Over 93,000 Chapter 1 migrant students were tested in reading and almost 79,000 were tested in mathematics. Ten states provided information on the number of Chapter 1 migrant education participants tested using criterion referenced tests or locally-developed measures. Over 19,500 Chapter 1 migrant students were tested in reading and over 20,000 were tested in mathematics. (Tables 3 and 4)

Of the total number of participants receiving migrant education services in the regular term, 37 percent were tested in reading and 32 percent were tested in mathematics using a variety of test measures. Information was not available, however, to determine what percentage of those tested in reading or mathematics actually received reading or mathematics services.[4] (Tables 3 and 4)

In the ten states that used criterion referenced tests and/or locally-developed tests, a variety of measures were used to assess achievement. (Table 5)

---

[2]This discussion is based on information submitted in the State Performance Reports and information obtained through telephone conversations with state officials. Appendix A discusses the methodology used in reviewing the submitted information.

[3]Two states did not operate migrant education projects in the regular term.

[4]In two states and Puerto Rico, there were more participants tested in reading than were reported receiving reading services in the Chapter 1 migrant education program, and in two states, there were more participants tested in mathematics than were reported receiving mathematics services in the Chapter 1 migrant education program.

Table 1

Regular Term
Statewide Achievement Information by Subject Area and
State -- 1987-88 Chapter 1 Migrant Education Program

State	Statewide Achievement Data Provided	Subject Area				
		Reading	Math	Other Language Arts	English to Limited English Background	Other
Alabama	X	X	X	X		
Alaska	X	X	X	X		
Arizona	X	X	X	X		
Arkansas	X	X	X			
California	X	X	X	X		
Colorado	X	X	X			
Connecticut	X	X	X	X		
Delaware	X	X	X	X		
District of Columbia	X	X	X			
Florida	X	X	X	X		
Georgia	X	X	X	X		X
Idaho	X	X	X	X	X	
Illinois	X	X	X	X	X	
Indiana	X	X	X			
Iowa[a/]	X					
Kansas	X	X	X			
Kentucky	X	X	X	X		X
Louisiana	X	X	X	X		
Maine	X	X	X			
Maryland						
Massachusetts						
Michigan						
Minnesota						
Mississippi	X	X	X	X		
Missouri	X	X	X	X	X	
Montana[b/]						
Nebraska[b/]						
Nevada	X	X	X	X		
New Hampshire						
New Jersey	X	X	X			X

Table 1 (continued)

State	Statewide Achievement Data Provided	Subject Area				
		Reading	Math	Other Language Arts	English to Limited English Background	Other
New Mexico	X	X	X	X		
New York	X	X	X		X	X
North Carolina	X	X	X	X		
North Dakota						
Ohio						
Oklahoma	X	X	X	X		
Oregon	X	X	X	X		
Pennsylvania	X	X	X			
Puerto Rico	X	X	X			X
Rhode Island						
South Carolina	X	X	X			
South Dakota	X	X	X	X		
Tennessee	X	X	X			
Texas	X	X	X			
Utah						
Vermont						
Virginia	X	X	X			
Washington	X	X	X	X		
West Virginia						
Wisconsin						
Wyoming						
Total	36	35	35	21	4	5

a/ Iowa provided statewide achievement information in a narrative format, but did not provide the information by subject area.

b/ Montana and Nebraska did not operate migrant education projects in the regular term.

Table 2

Regular Term
Statewide Achievement Testing
by Type and State -- 1987-88
Chapter 1 Migrant Education Program

State	Norm Referenced	Criterion Referenced	Locally-Developed
Alabama	X		
Alaska	X		
Arizona	X		
Arkansas	X	X	
California	X	X	
Colorado	X	X	
Connecticut	X		
Delaware	X		
District of Columbia			X
Florida	X		
Georgia	X		
Idaho	X		
Illinois		X	
Indiana	X		
Iowa	X		
Kansas	X		
Kentucky	X		
Louisiana	X		
Maine	X		
Maryland			
Massachusetts			
Michigan			
Minnesota			
Mississippi	X		
Missouri		X	X
Montana[a/]			
Nebraska[a/]			
Nevada	X		
New Hampshire			
New Jersey	X		
New Mexico	X		
New York		X	
North Carolina	X		
North Dakota			
Ohio			

Table 2 (continued)

State	Norm Referenced	Criterion Referenced	Locally-Developed
Oklahoma	X		
Oregon	X		
Pennsylvania	X		
Puerto Rico		X	
Rhode Island			
South Carolina	X		
South Dakota	X		
Tennessee	X	X	
Texas	X		
Utah			
Vermont			
Virginia		X	
Washington	X		
West Virginia			
Wisconsin			
Wyoming			
Total	30	9	2

a/ Montana and Nebraska did not operate migrant education projects in the regular term.

Table 3

Regular Term
Participants Receiving Reading Services and Number Tested in Reading by State -- 1987-88
Chapter 1 Migrant Education Program

State	Number of Participants[a]	Number Receiving Reading[a]	Number Tested in Reading	
			Using Norm Referenced Measures	Using Criterion Referenced or Locally-Developed Measures
Alabama	2,281	871	465	-
Alaska	5,961	7,421	2,762	-
Arizona	12,316	4,237	7,032[b]	-
Arkansas	6,754	3,196	1,186	190
California	105,095	29,450	45,099[c]	15,806
Colorado	1,997	979	472	648
Connecticut	3,864	1,435	546	-
Delaware	168	118	-[e]	-
District of Columbia	89	0	-	17
Florida	18,631	8,646	2,260	-
Georgia	4,626	1,838	539	-
Idaho	2,898	1,831	545	-
Illinois	779	486	-	485
Indiana	2,434	281	237	-
Iowa	139	46	-[f]	-
Kansas	4,282	1,046	698	-
Kentucky	2,694	1,301	1,882[b]	-
Louisiana	5,689	3,832	2,258	-
Maine	3,695	2,538	1,132	-
Maryland[d]	19	0	-	-
Massachusetts[d]	2,958	2,434	-	-
Michigan[d]	8,381	5,203	-	-
Minnesota[d]	572	227	-	-
Mississippi	3,853	1,540	889	-
Missouri	1,485	632	-	737[g]
Montana[h]	0	0	-	-
Nebraska[h]	0	0	-	-
Nevada	513	414	127	-
New Hampshire[d]	118	8	-	-
New Jersey	1,461	370	451[i]	-

Table 3 (continued)

State	Number of Participants[a/]	Number Receiving Reading[a/]	Number Tested in Reading: Using Norm Referenced Measures	Number Tested in Reading: Using Criterion Referenced or Locally-Developed Measures
New Mexico	1,219	214	51	-
New York	4,892	4,138	-	997
North Carolina	3,818	2,592	755	-
North Dakota[d/]	134	134	-	-
Ohio[d/]	1,277	289	-	-
Oklahoma	1,582	763	473	-
Oregon	8,764	2,375	1,160	-
Pennsylvania	2,444	623	-[i/]	-
Puerto Rico	9,160	566	-	800[b/]
Rhode Island[d/]	77	0	-	-
South Carolina	123	112	64	-
South Dakota	44	33	19	-
Tennessee	112	112	57	16
Texas	57,970	37,883	22,371	-
Utah[d/]	35	35	-	-
Vermont[d/]	806	25	-	-
Virginia	530	300	-	84
Washington[k/]	10,678	4,611	57	-
West Virginia[d/]	56	16	-	-
Wisconsin[d/]	768	588	-	-
Wyoming[d/]	8	0	-	-
Total	308,249	135,789	93,587	19,780

a/ Data from *A Summary of State Chapter 1 Migrant Education Participation and Achievement for 1987-88, Volume 1: Participation*, 1990.

b/ In Arizona, Kentucky, and Puerto Rico, there were more participants tested in reading than were reported receiving reading services. SEA officials explained that the number tested represents migrant education participants given a reading test even though they may have received services other than reading.

c/ California provided two types of norm referenced achievement data--one set for participants receiving only migrant education services and one set for participants receiving both migrant education and state compensatory education services. The number tested for the two groups was combined, and represents a duplicate count.

Table 3 (continued)

d/ Maryland, Massachusetts, Michigan, Minnesota, New Hampshire, North Dakota, Ohio, Rhode Island, Utah, Vermont, West Virginia, Wisconsin, and Wyoming did not provide achievement information for the regular term.

e/ Delaware presented NCE score data in a graph. The number of participants tested was not provided.

f/ Iowa submitted achievement information in a narrative format which did not include the number of participants tested by subject or grade.

g/ Missouri tested participants on a range of basic skills. The number tested is a duplicate count.

h/ Montana and Nebraska did not operate migrant education projects in the regular term.

i/ In New Jersey, all children who were identified as migrant were tested through the Chapter 1 program, although they may not have received migrant education services. As a result, the number tested exceeds the number reported receiving reading services.

j/ Pennsylvania provided achievement information in a narrative format. The number of participants tested was not provided.

k/ Washington submitted a statewide achievement report, but because the number tested was not representative of the participants receiving migrant education services, the Washington SEA requested that the NCE scores not be reported. As a result, Washington's information was not included in the state level aggregation of NCE data and are not a part of the total number tested in Tables 11, 12, 13, and 14.

Table 4

Regular Term
Participants Receiving Mathematics Services and Number Tested in Mathematics by State -- 1987-88
Chapter 1 Migrant Education Program

State	Number of Participants[a]	Number Receiving Mathematics[a]	Number Tested in Mathematics	
			Using Norm Referenced Measures	Using Criterion Referenced or Locally-Developed Measures
Alabama	2,281	1,670	771	-
Alaska	5,961	4,751	2,656	-
Arizona	12,316	3,682	6,951[b]	-
Arkansas	6,754	2,294	850	121
California	105,095	24,308	44,830[c]	16,635
Colorado	1,997	812	390	389
Connecticut	3,864	456	106	-
Delaware	168	100	-[e]	-
District of Columbia	89	0	-	17
Florida	18,631	2,074	487	-
Georgia	4,626	1,485	617	-
Idaho	2,898	1,261	376	-
Illinois	779	500	-	463
Indiana	2,434	266	228	-
Iowa	139	41	-[f]	-
Kansas	4,282	537	66	-
Kentucky	2,694	1,855	1,882[b]	-
Louisiana	5,689	3,495	1,929	-
Maine	3,695	1,916	857	-
Maryland[d]	19	19	-	-
Massachusetts[d]	2,958	2,515	-	-
Michigan[d]	8,381	4,619	-	-
Minnesota[d]	572	140	-	-
Mississippi	3,853	924	503	-
Missouri	1,485	628	-	685[g]
Montana[h]	0	0	-	-
Nebraska[h]	0	0	-	-
Nevada	513	259	101	-
New Hampshire[d]	118	5	-	-
New Jersey	1,461	328	417[i]	-

Table 4 (continued)

State	Number of Participants[a/]	Number Receiving Mathematics[a/]	Number Tested in Mathematics: Using Norm Referenced Measures	Number Tested in Mathematics: Using Criterion Referenced or Locally-Developed Measures
New Mexico	1,219	361	185	-
New York	4,892	2,693	-	643
North Carolina	3,818	2,108	755	-
North Dakota[d/]	134	134	-	-
Ohio[d/]	1,277	270	-	-
Oklahoma	1,582	972	648	-
Oregon	8,764	1,481	1,102	-
Pennsylvania	2,444	481	-[i/]	-
Puerto Rico	9,160	1,511	-	1,205
Rhode Island[d/]	77	0	-	-
South Carolina	123	112	64	-
South Dakota	44	32	19	-
Tennessee	112	112	59	16
Texas	57,970	21,552	11,812	-
Utah[d/]	35	35	-	-
Vermont[d/]	806	0	-	-
Virginia	530	530	-	54
Washington[k/]	10,678	3,362	114	-
West Virginia[d/]	56	0	-	-
Wisconsin[d/]	768	246	-	-
Wyoming[d/]	8	0	-	-
Total	308,249	96,932	78,775	20,228

a/ Data from *A Summary of State Chapter 1 Migrant Education Participation and Achievement for 1987-88, Volume 1: Participation*, 1990.

b/ In Arizona and Kentucky, there were more participants tested in mathematics than were reported receiving mathematics services. SEA officials explained that the number tested represents migrant education participants given a mathematics test even though they may have received services other than mathematics.

c/ California provided two types of norm referenced achievement data--one set for participants receiving only migrant education services and one set for participants receiving both migrant education and state compensatory education services. The number tested for the two groups was combined, and represents a duplicate count.

Table 4 (continued)

d/ Maryland, Massachusetts, Michigan, Minnesota, New Hampshire, North Dakota, Ohio, Rhode Island, Utah, Vermont, West Virginia, Wisconsin, and Wyoming did not provide achievement information for the regular term.

e/ Delaware presented NCE score data in a graph. The number of participants tested was not provided.

f/ Iowa submitted achievement information in a narrative format which did not include the number of participants tested by subject or grade.

g/ Missouri tested participants on a range of basic skills. The number tested is a duplicate count.

h/ Montana and Nebraska did not operate migrant education projects in the regular term.

i/ In New Jersey, all children who were identified as migrant were tested through the Chapter 1 program, although they may not have received migrant education services. As a result, the number tested exceeds the number reported receiving mathematics services.

j/ Pennsylvania reported achievement information in a narrative format. The number of participants tested was not included.

k/ Washington submitted a statewide achievement report, but because the number tested was not representative of the participants receiving migrant education services, the Washington SEA requested that the NCE scores not be reported. As a result, Washington's information was not included in the state level aggregation of NCE data and are not a part of the total number tested in Tables 11, 12, 13, and 14.

Table 5

Regular Term
Number Tested Using Criterion-Referenced and Locally-Developed
Measures by State--1987-88
Chapter 1 Migrant Education Program

State	Measure Used	Number Tested	
		Reading	Mathematics
Arkansas	Average Number Skills Gained	190	121
California	Number Above Grade Level	15,806	16,635
Colorado	Number of Objectives Mastered	648	389
District of Columbia	The Actual Grade Level of the Student in Relation to Modal Grade Level	17	17
Illinois	Percent not Meeting, Percent Meeting and/or Exceeding Standards	485	463
Missouri	Average Percent Gain	737[a/]	685[a/]
New York	Number of Objectives Mastered	997	643
Puerto Rico	Average Number of Skills Mastered	800	1,205
Tennessee	Skills Gained	16	16
Virginia[b/]	- -	84	54
Total Tested		19,780	20,228

a/ Missouri tested participants on a range of basic skills. The number tested is a duplicate count.

b/ Virginia submitted district level information using a variety of test measures.

Summer Term Reports

In the summer term, 17 states (out of 46) provided statewide achievement information.[5] Seventeen states provided reading and 16 states provided mathematics achievement. Achievement information in other language arts was provided by seven states and English to limited English background students by three states. (Table 6)

Summer term achievement results were divided among norm referenced tests (seven states), criterion referenced tests (10 states), and locally-developed instruments (three states). (Table 7)

Six states provided information on the number of Chapter 1 migrant education participants tested using norm referenced measures. About 1,000 Chapter 1 migrant students were tested in both reading and in mathematics. Nine states provided information on the number of Chapter 1 migrant education participants tested using criterion referenced tests or locally-developed measures. Over 5,000 Chapter 1 migrant students were tested in both reading and mathematics. (Tables 8 and 9)

Of the total number of participants receiving migrant education services in the summer term, 6 percent were tested in reading and mathematics using a variety of test measures. Information was not available, however, to determine what percentage of those tested in reading or mathematics actually received reading or mathematics services. (Tables 8 and 9)

In the 11 states that used criterion referenced tests and/or locally-developed tests, a variety of measures were used to assess achievement. (Table 10)

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[5]Four states and Puerto Rico did not operate migrant education projects in the summer term.

Table 6

Summer Term
Statewide Achievement Information
by Subject Area and State -- 1987-88
Chapter 1 Migrant Education Program

State	Statewide Achievement Data Provided	Subject Area				
		Reading	Math	Other Language Arts	English to Limited English Background	Other
Alabama						
Alaska						
Arizona						
Arkansas						
California						
Colorado	X	X	X			
Connecticut						
Delaware						
District of Columbia						
Florida						
Georgia						
Idaho						
Illinois	X	X	X	X	X	
Indiana	X	X	X			
Iowa[a/]						
Kansas	X	X	X			X
Kentucky						
Louisiana[a/]						
Maine						
Maryland	X	X	X	X		
Massachusetts						
Michigan						
Minnesota	X	X	X	X		
Mississippi[a/]						
Missouri	X	X	X	X	X	X
Montana	X	X	X			
Nebraska	X	X	X	X		X
Nevada						
New Hampshire						
New Jersey						

Table 6 (continued)

State	Statewide Achievement Data Provided	Subject Area				
		Reading	Math	Other Language Arts	English to Limited English Background	Other
New Mexico						
New York						
North Carolina						
North Dakota	X	X				
Ohio	X	X	X			
Oklahoma[a/]						
Oregon						
Pennsylvania						
Puerto Rico[a/]						
Rhode Island	X	X	X			
South Carolina	X	X	X			
South Dakota						
Tennessee	X	X	X	X	X	X
Texas						
Utah	X	X	X			X
Vermont						
Virginia	X	X	X			
Washington						
West Virginia						
Wisconsin	X	X	X	X		
Wyoming						
Total	17	17	16	7	3	5

a/ Iowa, Louisiana, Mississippi, Oklahoma, and Puerto Rico did not operate migrant projects in the summer term.

Table 7

Summer Term
Statewide Achievement Testing
by Type and State -- 1987-88
Chapter 1 Migrant Education Program

State	Norm Referenced	Criterion Referenced	Locally-Developed
Alabama			
Alaska			
Arizona			
Arkansas			
California			
Colorado		X	
Connecticut			
Delaware			
District of Columbia			
Florida			
Georgia			
Idaho			
Illinois		X	
Indiana	X		
Iowa[a/]			
Kansas		X	
Kentucky			
Louisiana[a/]			
Maine			
Maryland	X		
Massachusetts			
Michigan			
Minnesota		X	
Mississippi[a/]			
Missouri		X	X
Montana		X	
Nebraska		X	
Nevada			
New Hampshire			
New Jersey			
New Mexico			
New York			
North Carolina			
North Dakota	X		
Ohio	X		

Table 7 (continued)

State	Norm Referenced	Criterion Referenced	Locally-Developed
Oklahoma[a/]			
Oregon			
Pennsylvania			
Puerto Rico[a/]			
Rhode Island		X	
South Carolina		X	
South Dakota			
Tennessee		X	X
Texas			
Utah	X		
Vermont			
Virginia	X		
Washington			
West Virginia			
Wisconsin	X		X
Wyoming			
Total	7	10	3

a/ Iowa, Louisiana, Mississippi, Oklahoma, and Puerto Rico did not operate migrant projects in the summer term.

Table 8

Summer Term
Participants Receiving Reading Services and Number Tested in Reading by State -- 1987-88
Chapter 1 Migrant Education Program

State	Number of Participants[a]	Number Receiving Reading[a]	Number Tested in Reading	
			Using Norm Referenced Measures	Using Criterion Referenced or Locally-Developed Measures
Alabama[b]	499	349	-	-
Alaska[b]	517	446	-	-
Arizona[b]	1,537	1,127	-	-
Arkansas[b]	282	24	-	-
California[b]	45,656	33,519	-	-
Colorado	1,982	1,971	-	1,695
Connecticut[b]	359	259	-	-
Delaware[b]	394	313	-	-
District of Columbia[b]	19	19	-	-
Florida[b]	624	245	-	-
Georgia[b]	2,356	1,914	-	-
Idaho[b]	1,309	1,180	-	-
Illinois	2,060	1,936	-	1,933
Indiana	2,080	201	38	-
Iowa[c]	0	0	-	-
Kansas	913	250	-	297
Kentucky[b]	286	0	-	-
Louisiana[c]	0	0	-	-
Maine[b]	295	226	-	-
Maryland	670	331	190	-
Massachusetts[b]	3,627	3,098	-	-
Michigan[b]	8,231	7,556	-	-
Minnesota	3,268	1,510	-	577
Mississippi[c]	0	0	-	-
Missouri	438	159	-	150

Table 8 (continued)

State	Number of Participants[a/]	Number Receiving Reading[a/]	Number Tested in Reading: Using Norm Referenced Measures	Number Tested in Reading: Using Criterion Referenced or Locally-Developed Measures
Montana	763	480	-	221
Nebraska	714	529	-	-[d/]
Nevada[b/]	28	28	-	-
New Hampshire[b/]	82	21	-	-
New Jersey[b/]	767	669	-	-
New Mexico[b/]	599	23	-	-
New York[b/]	3,287	3,118	-	-
North Carolina[b/]	2,254	1,627	-	-
North Dakota	1,445	1,231	-[d/]	-
Ohio	1,780	312	196	-
Oklahoma[c/]	0	0	-	-
Oregon[b/]	5,186	2,622	-	-
Pennsylvania[b/]	1,278	597	-	-
Puerto Rico[c/]	0	0	-	-
Rhode Island	26	26	-	-[d/]
South Carolina	558	320	-	292
South Dakota[b/]	37	14	-	-
Tennessee	243	243	-	201
Texas[b/]	3,196	2,387	-	-
Utah	992	699	404	-
Vermont[b/]	284	181	-	-
Virginia	467	366	121	-
Washington[b/]	2,900	2,143	-	-
West Virginia[b/]	43	43	-	-
Wisconsin	611	451	55	374
Wyoming[b/]	477	0	-	-
Total	105,419	74,763	1,004	5,740

a/ Data from *A Summary of State Chapter 1 Migrant Education Participation and Achievement for 1987-88, Volume 1: Participation*, 1990.

Table 8 (continued)

b/ Alabama, Alaska, Arizona, Arkansas, California, Connecticut, Delaware, District of Columbia, Florida, Georgia, Idaho, Kentucky, Maine, Massachusetts, Michigan, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, Oregon, Pennsylvania, South Dakota, Texas, Vermont, Washington, West Virginia, and Wyoming did not provide achievement information for the summer term.

c/ Iowa, Louisiana, Mississippi, Oklahoma, and Puerto Rico did not operate migrant projects in the summer term.

d/ Nebraska, North Dakota, and Rhode Island provided achievement information, but did not report the number tested.

Table 9

Summer Term
Participants Receiving Mathematics Services and Number Tested in Mathematics by State -- 1987-88
Chapter 1 Migrant Education Program

State	Number of Participants[a/]	Number Receiving Mathematics[a/]	Number Tested in Mathematics	
			Using Norm Referenced Measures	Using Criterion Referenced or Locally-Developed Measures
Alabama[b/]	499	292	-	-
Alaska[b/]	517	31	-	-
Arizona[b/]	1,537	842	-	-
Arkansas[b/]	282	0	-	-
California[b/]	45,656	32,738	-	-
Colorado	1,982	2,061	-	1,230
Connecticut[b/]	359	27	-	-
Delaware[b/]	394	304	-	-
District of Columbia[b/]	19	0	-	-
Florida[b/]	624	244	-	-
Georgia[b/]	2,356	1,802	-	-
Idaho[b/]	1,309	1,217	-	-
Illinois	2,060	1,877	-	1,844
Indiana	2,080	204	42	-
Iowa[c/]	0	0	-	-
Kansas	913	404	-	141
Kentucky[b/]	286	177	-	-
Louisiana[c/]	0	0	-	-
Maine[b/]	295	226	-	-
Maryland	670	332	188	-
Massachusetts[b/]	3,627	3,078	-	-
Michigan[b/]	8,231	7,476	-	-
Minnesota	3,268	1,505	-	726
Mississippi[c/]	0	0	-	-
Missouri	438	160	-	150

Table 9 (continued)

State	Number of Participants[a]	Number Receiving Mathematics[a]	Number Tested in Mathematics: Using Norm Referenced Measures	Number Tested in Mathematics: Using Criterion Referenced or Locally-Developed Measures
Montana	763	480	-	335
Nebraska	714	529	-	-[d]
Nevada[b]	28	0	-	-
New Hampshire[b]	82	19	-	-
New Jersey[b]	767	667	-	-
New Mexico[b]	599	538	-	-
New York[b]	3,287	2,126	-	-
North Carolina[b]	2,254	1,577	-	-
North Dakota[a]	1,445	951	-	-
Ohio	1,780	331	196	-
Oklahoma[c]	0	0	-	-
Oregon[b]	5,186	2,663	-	-
Pennsylvania[b]	1,278	571	-	-
Puerto Rico[c]	0	0	-	-
Rhode Island	26	26	-	-[d]
South Carolina	558	320	-	292
South Dakota[b]	37	5	-	-
Tennessee	243	243	-	218
Texas[b]	3,196	2,287	-	-
Utah	992	696	404	-
Vermont[b]	284	179	-	-
Virginia	467	467	117	-
Washington[b]	2,900	2,398	-	-
West Virginia[b]	43	22	-	-
Wisconsin	611	480	55	349
Wyoming[b]	477	0	-	-
Total	105,419	72,572	1,002	5,285

Table 9 (continued)

a/ Data from *A Summary of State Chapter 1 Migrant Education Participation and Achievement for 1987-88, Volume 1: Participation*, 1990.

b/ Alabama, Alaska, Arizona, Arkansas, California, Connecticut, Delaware, District of Columbia, Florida, Georgia, Idaho, Kentucky, Maine, Massachusetts, Michigan, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, Oregon, Pennsylvania, South Dakota, Texas, Vermont, Washington, West Virginia, and Wyoming did not provide achievement information for the summer term.

c/ Iowa, Louisiana, Mississippi, Oklahoma, and Puerto Rico did not operate migrant projects in the summer term.

d/ Nebraska and Rhode Island provided achievement information, but did not report the number tested.

e/ North Dakota did not provide mathematics achievement information for the summer term.

Table 10

Summer Term
Number Tested Using Criterion-Referenced and Locally-Developed Measures by State--1987-88
Chapter 1 Migrant Education Program

State	Measure Used	Number Tested	
		Reading	Mathematics
Colorado	Average Instruction Hours Per Week/ Average Indicators of Achievement	1,695	1,230
Illinois	Percent Meeting Standards	1,933	1,844
Kansas	Rating Scale of Student Progress	297	141
Minnesota	Estimated Achievement Gains	577	726
Missouri	Average Number of Objectives Mastered/Average Percent of Gain	150	150
Montana	Weighted Mean Raw Scores	221	335
Nebraska	Objectives Mastered	a/	a/
Rhode Island	Correlation of Grade Level to Lesson	a/	a/
South Carolina	Objectives Mastered	292	292
Tennessee	Skills Mastered	201	218
Wisconsin	Number of Competencies	374	349
Total Tested		5,740	5,285

a/ Nebraska and Rhode Island provided achievement information, but did not report the number tested.

Summary Results from Selected States

Twenty states reported achievement information for the regular term by grade expressed in normal curve equivalent (NCE) scores using a pretest/posttest norm referenced model.[6]

Although the summary figures for this group of states are not national estimates of the overall achievement levels of migrant education participants, they do provide a measure of achievement for the participants tested in these selected states.

Several factors affect the assessment of achievement outcomes in migrant education projects. Among the most important factors are:

- Since there were no standardized reporting requirements, states provided information from a variety of test types (such as norm referenced, criterion referenced, and locally-developed), using a range of test measures (such as normal curve equivalents, grade equivalents, number of objectives mastered, and number of skills mastered);

- Currently migrant students were typically the least likely to be part of project evaluation testing (especially testing with a pre/post design) because of their mobility and their language deficits;

- Standardized tests, with norms for fall and spring testing, may not be compatible with the short term basis of many migrant projects or the cyclical patterns of migrant movement; and

- Most states submitted results for participants tested in reading and mathematics. However, projects funded by the Chapter 1 migrant education program tended to be highly diversified. Thus, evaluations of performance in these two subject areas may be inappropriate or inadequate measures of the impact of the services provided.

With the above cautions in mind, the following summary findings are presented for those states reporting regular term achievement results, expressed in NCE scores, using a pretest/posttest norm referenced model.

The largest number of participants were tested in annual reading (42,043), followed by annual mathematics (28,038), fall-spring reading (3,633), and fall-spring mathematics (2,935). (Figure 1) The majority of students tested were in the elementary grades.

Children of migrant workers traditionally have been regarded as one of the most educationally disadvantaged segments of the school-aged population. Over 40 percent of the summary pretest percentiles fell at or below the 25th percentile. In both the annual and fall-

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[6]The NCE is a type of standard score resulting from the division of the normal curve into 99 equal units, and is derived from the percentile rank. The mean of the NCE score distribution is 50, and the standard deviation is 21.06.

spring cycles, summary pretest percentiles were higher in mathematics than in reading. On average, pretest percentiles were higher at the elementary level than at the secondary level. (Tables 11, 12, 13, and 14)

Participants tested on a fall-spring cycle demonstrated higher NCE gains than students tested on an annual cycle. Summary NCE gains within test cycles tended to be higher in mathematics than in reading. (Figures 2, 3, 4, and 5 and Tables 11, 12, 13, and 14)

Annual Test Results. Nineteen states reported achievement results based on an annual test cycle.[7] In these states there were 42,043 participants tested in reading and 28,038 tested in mathematics. Positive NCE gain scores were experienced in all grades except grade 12 in reading and grade 8 in mathematics. The total summary gains in reading ranged from -1.1 NCEs in grade 12 to 2.0 NCEs in grade 4. The total summary pretest percentiles in reading ranged from the 15th percentile in grade 9 to the 29th percentile in grade 2. (Figure 2 and Table 11)

In mathematics, the total summary NCE gains ranged from no gain in grade 8 to 3.6 NCEs in grade 5. The total summary pretest percentiles in mathematics ranged from the 27th percentile in grade 9 to the 41st percentile in grades 2 and 3. (Figure 3 and Table 12)

Fall-Spring Test Results. Eleven states reported reading achievement results and 12 states reported mathematics achievement results based on a fall-spring test cycle.[8] In these states there were 3,633 participants tested in reading and 2,935 tested in mathematics. Positive NCE gain scores were experienced in reading and mathematics in all grades. The total summary gains in reading ranged from 4.0 NCEs in grade 10 to 11.4 NCEs in grade 2. The total summary pretest percentiles in reading ranged from the 20th percentile in grade 3 to the 44th percentile in grade 12. (Figure 4 and Table 13)

In mathematics, the total summary gains ranged from 1.9 NCEs in grade 10 to 13.6 NCEs in grade 12. The total summary pretest percentiles in mathematics ranged from the 23rd percentile in grades 5 and 12 to the 51st percentile in grade 11. (Figure 5 and Table 14)

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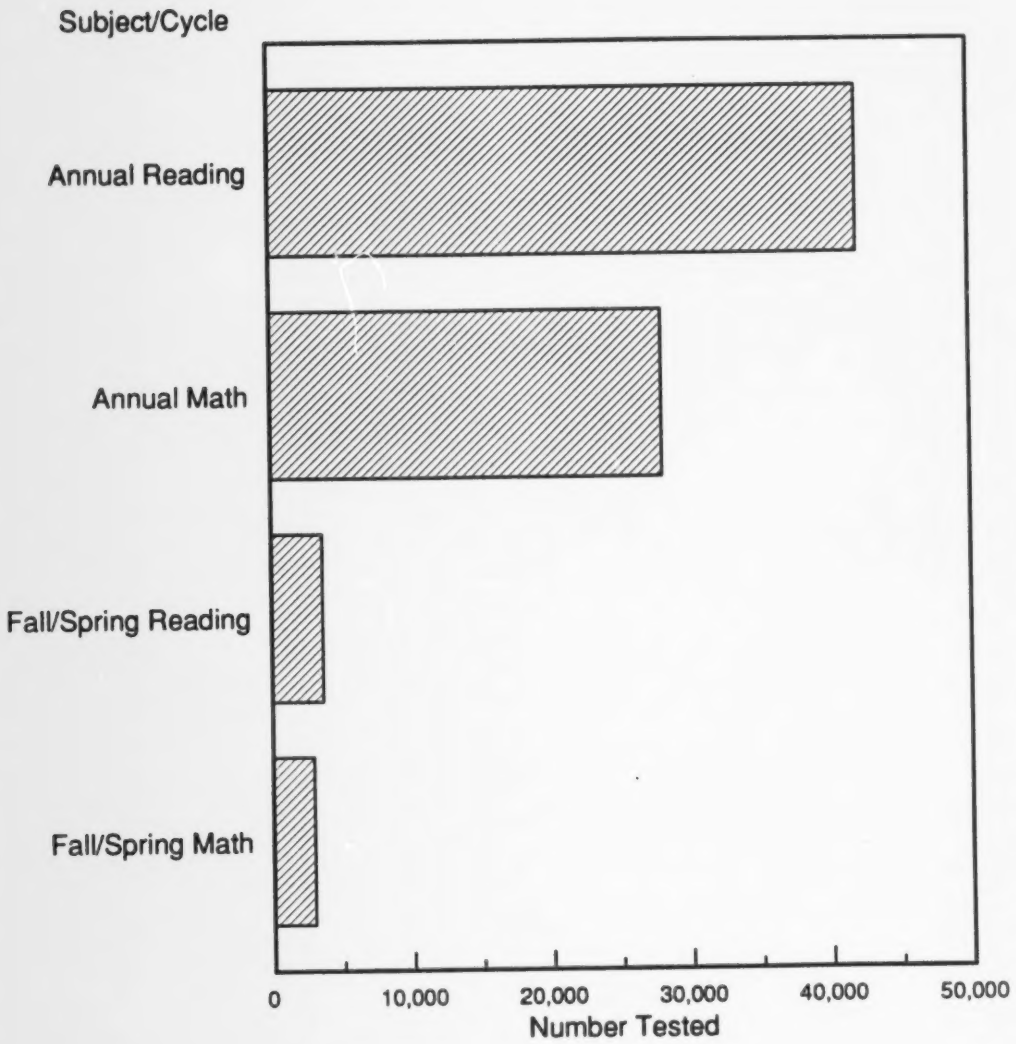
[7]These 19 states are Alabama, Alaska, California, Colorado, Connecticut, Florida, Georgia, Idaho, Louisiana, Maine, Mississippi, Nevada, New Jersey, New Mexico, Oklahoma, Oregon, South Carolina, South Dakota, and Texas.

[8]These 11 states are Alabama, Arkansas, Colorado, Connecticut, Idaho, Louisiana, Maine, Mississippi, Nevada, New Jersey, and Oklahoma. New Mexico reported results only for mathematics.

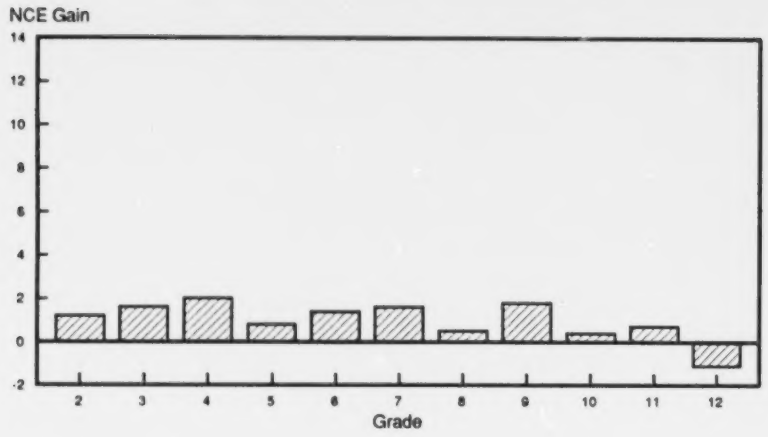
Figure 1

Number of Participants with Pretest and Posttest Reading and Mathematics NCE Scores, by Cycle -- 1987-88



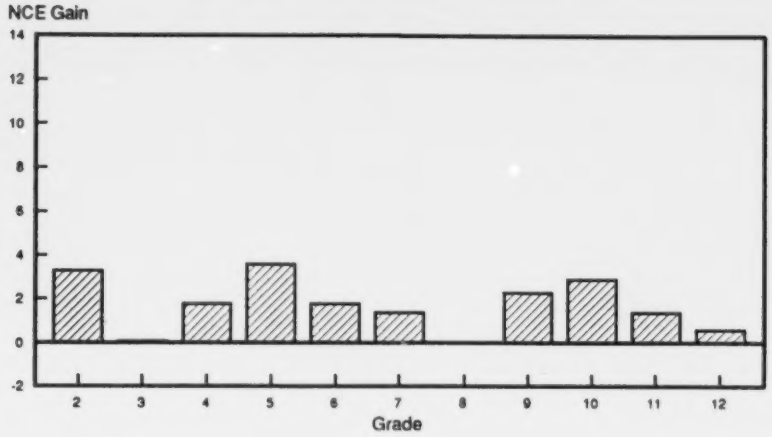
19 States Tested on an Annual Cycle
11 States Tested in Fall/Spring Reading
12 States Tested in Fall/Spring Mathematics

Figure 2
Migrant Education
Annual Reading NCE Gains: 1987-88



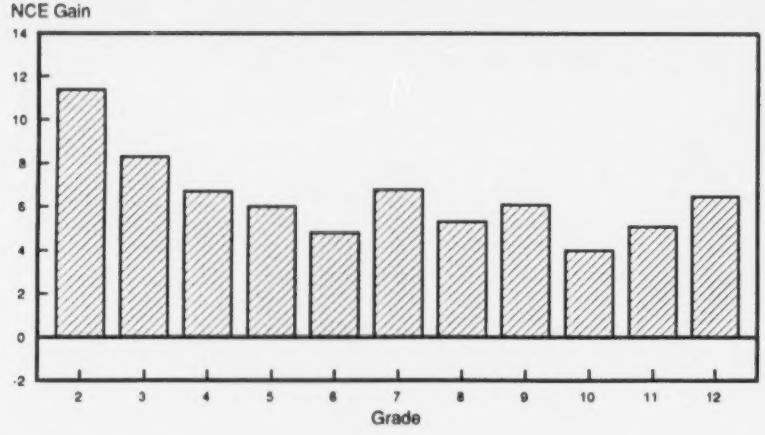
19 States Reporting

Figure 3
Migrant Education
Annual Mathematics NCE Gains: 1987-88



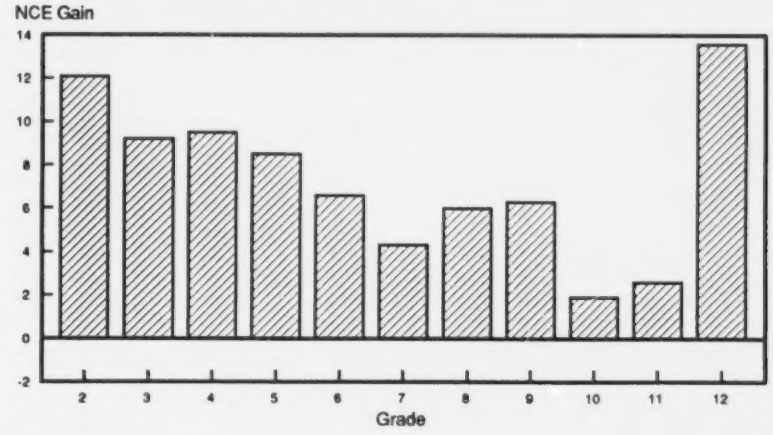
19 States Reporting

Figure 4
Migrant Education
Fall/Spring Reading NCE Gains: 1987-88



11 States Reporting

Figure 5
Migrant Education
Fall/Spring Mathematics NCE Gains: 1987-88



12 States Reporting

Table 11

Reading Achievement Results for Selected States
Annual Test Cycle by Grade--1987-88 Chapter 1
Migrant Education Programs[a/]

Grade	Number Tested	Pretest NCE	Pretest Percentile	Posttest NCE	Posttest Percentile	Gain NCE
2	4,272	38.8	29	40.0	31	1.2
3	5,434	34.8	23	36.4	25	1.6
4	5,375	34.6	23	36.6	26	2.0
5	5,710	34.4	23	35.2	24	0.8
6	5,635	34.5	23	35.9	25	1.4
7	4,575	33.4	21	35.0	23	1.6
8	4,089	33.0	21	33.5	21	0.5
9	2,532	28.9	15	30.7	18	1.8
10	2,050	30.1	17	30.5	17	0.4
11	1,331	31.0	18	31.7	19	0.7
12	1,040	31.9	19	30.8	18	-1.1
Total[b/]	42,043					

a/ Nineteen states (Alabama, Alaska, California, Colorado, Connecticut, Florida, Georgia, Idaho, Louisiana, Maine, Mississippi, Nevada, New Jersey, New Mexico, Oklahoma, Oregon, South Carolina, South Dakota, and Texas) provided achievement information by grade using a pretest/posttest norm-referenced model.

b/ The sum of the number tested in reading on Tables 11 and 13 is not the same as the total number tested in reading using norm-referenced testing on Table 3 for three reasons. First, the numbers on Table 3 represent achievement results from a variety of test scores, not just pretest/posttest NCE scores, as shown on Tables 11 and 13. Second, Tables 11 and 13 include information for participants in grades 2 through 12 only, while Table 3 also includes information for kindergarten and grade 1. Third, the Washington SEA requested that the NCE scores not be reported since the number tested was not representative of participants receiving migrant education services.

California administered norm-referenced reading tests to over 40,000 participants, but only provided NCE pre-, posttest, and gain scores for 8,862 participants.

Table 12

Mathematics Achievement Results for Selected States
Annual Test Cycle by Grade--1987-88 Chapter 1
Migrant Education Program[a/]

Grade	Number Tested	Pretest NCE	Pretest Percentile	Posttest NCE	Posttest Percentile	Gain NCE
2	3,139	45.6	41	48.9	48	3.3
3	3,666	45.7	41	45.8	42	0.1
4	4,034	43.3	37	45.1	40	1.8
5	4,187	41.3	34	44.9	40	3.6
6	3,754	44.3	39	46.1	42	1.8
7	2,768	41.3	34	42.7	36	1.4
8	2,431	41.4	34	41.4	34	0.0
9	1,713	37.2	27	39.5	30	2.3
10	1,174	37.8	28	40.7	33	2.9
11	693	38.3	29	39.7	31	1.4
12	479	39.3	30	39.9	31	0.6
Total[b/]	28,038					

a/ Nineteen states (Alabama, Alaska, California, Colorado, Connecticut, Florida, Georgia, Idaho, Louisiana, Maine, Mississippi, Nevada, New Jersey, New Mexico, Oklahoma, Oregon, South Carolina, South Dakota, and Texas) provided achievement information by grade using a pretest/posttest norm-referenced model.

b/ The sum of the number tested in mathematics on Tables 12 and 14 is not the same as the total number tested in mathematics using norm-referenced testing on Table 4 for three reasons. First, the numbers on Table 4 represent achievement results from a variety of test scores, not just pretest/posttest NCE scores, as shown on Tables 12 and 14. Second, Tables 12 and 14 include information for participants in grades 2 through 12 only, while Table 4 also includes information for kindergarten and grade 1. Third, the Washington SEA requested that the NCE scores not be reported since the number tested was not representative of participants receiving migrant education services.

California administered norm-referenced mathematics tests to over 40,000 participants, but only provided NCE pre-, posttest, and gain scores for 7,890 participants.

Table 13

Reading Achievement Results for Selected States
Fall-Spring Test Cycle by Grade--1987-88
Chapter 1 Migrant Education Program[a/]

Grade	Number Tested	Pretest NCE	Pretest Percentile	Posttest NCE	Posttest Percentile	Gain NCE
2	648	33.5	21	44.9	40	11.4
3	567	32.6	20	40.9	33	8.3
4	610	35.6	24	42.3	35	6.7
5	572	33.6	21	39.6	31	6.0
6	459	37.0	26	41.8	34	4.8
7	270	36.4	25	43.2	37	6.8
8	241	34.1	22	39.4	30	5.3
9	79	34.0	22	40.1	32	6.1
10	65	40.1	32	44.1	39	4.0
11	54	40.9	33	46.0	42	5.1
12	68	46.8	44	53.3	56	6.5
Total[b/]	3,633					

a/ Eleven states (Alabama, Arkansas, Colorado, Connecticut, Idaho, Louisiana, Maine, Mississippi, Nevada, New Jersey, and Oklahoma) provided achievement information by grade using a pretest/posttest norm-referenced model.

b/ The sum of the number tested in reading on Tables 11 and 13 is not the same as the total number tested in reading using norm-referenced testing on Table 3 for three reasons. First, the numbers on Table 3 represent achievement results from a variety of test scores, not just pretest/posttest NCE scores, as shown on Tables 11 and 13. Second, Tables 11 and 13 include information for participants in grades 2 through 12 only, while Table 3 also includes information for kindergarten and grade 1. Third, the Washington SEA requested that the NCE scores not be reported since the number tested was not representative of participants receiving migrant education services.

Table 14

Mathematics Achievement Results for Selected States
Fall-Spring Test Cycle by Grade--1987-88
Chapter 1 Migrant Education Program[a/]

Grade	Number Tested	Pretest NCE	Pretest Percentile	Posttest NCE	Posttest Percentile	Gain NCE
2	507	41.4	34	53.5	56	12.1
3	434	40.8	33	50.0	50	9.2
4	472	41.4	34	50.9	51	9.5
5	453	35.0	23	43.5	37	8.5
6	383	40.3	32	46.9	44	6.6
7	241	42.7	36	47.0	44	4.3
8	200	39.9	31	45.9	42	6.0
9	89	36.5	26	42.8	36	6.3
10	77	48.7	47	50.6	51	1.9
11	59	50.5	51	53.1	55	2.6
12	20	34.7	23	48.3	46	13.6
Total[b/]	2,935					

a/ Twelve states (Alabama, Arkansas, Colorado, Connecticut, Idaho, Louisiana, Maine, Mississippi, Nevada, New Jersey, New Mexico, and Oklahoma) provided achievement information by grade using a pretest/posttest norm-referenced model.

b/ The sum of the number tested in mathematics on Tables 12 and 14 is not the same as the total number tested in mathematics using norm-referenced testing on Table 4 for three reasons. First, the numbers on Table 4 represent achievement results from a variety of test scores, not just pretest/posttest NCE scores, as shown on Tables 12 and 14. Second, Tables 12 and 14 include information for participants in grades 2 through 12 only, while Table 4 also includes information for kindergarten and grade 1. Third, the Washington SEA requested that the NCE scores not be reported since the number tested was not representative of participants receiving migrant education services.

STATE-BY-STATE DESCRIPTIONS

ALABAMA

During the regular term, the Alabama migrant education projects provided services to 2,281 students in pre-kindergarten through grade 12. Instructional services were provided in reading, language arts, mathematics, vocational/career education, career awareness, and sewing. Supporting services included attendance, social work, and guidance; health; dental; nutrition; pupil transportation; pupil services; and janitorial services. During the summer term, services were provided to 499 students in pre-kindergarten through grade 12. Summer term participants received instructional services in the summer term consisting of English to students of limited English background, reading, language arts, mathematics, vocational/career education early childhood education and sewing. Summer term participants did not receive career awareness or sewing services. Supporting services were the same as those for the regular term

Alabama provided pre- and post-test achievement data for migrant students in reading, mathematics, and language arts for the regular term. Data were reported in NCEs for fall-to-spring and annual testing cycles. Students were tested using the Stanford Achievement Test, Number 7 (SAT 7).

Table 15 provides pretest, posttest, and gain NCEs as well as the number tested, by subject area and grade, for participants tested on an annual test cycle. For reading, NCE gains ranged from 5.4 (grade 2) to -7.3 (grade 10). For mathematics, gains ranged from 12.3 NCEs (grade 4) to -8.5 NCEs (grade 11). For language arts, NCE gains ranged from 5.2 (grade 7) to -3.2 (grade 4).

Table 16 provides pretest, posttest, and gain NCEs as well as the number tested, by subject area and grade, for participants tested on a fall-to-spring test cycle. In reading, NCE gains ranged from 29.4 (grade 12) to -1.1 (grade 9). For mathematics, NCE gains ranged from 43.6 (grade 12) to -7.2 (grade 11).

Achievement information was not provided for the summer term.

Table 15

Chapter 1 Migrant Education Achievement Results
for Students Tested on an Annual Schedule,
by Subject Area, 1987-88

Alabama

Reading

Grade	Number Tested	NCE		
		Pretest	Posttest	Gain
K	--	--	--	--
1	--	--	--	--
2	24	34.8	40.2	5.4
3	24	38.4	40.1	1.7
4	17	45.2	44.4	-0.8
5	12	44.9	45.9	1.0
6	27	42.6	42.6	0.0
7	36	36.2	36.3	0.1
8	47	32.5	34.9	2.4
9	12	35.1	29.3	-5.8
10	12	33.8	26.5	-7.3
11	14	31.6	29.9	-1.7
12	13	26.0	24.2	-1.8
Total	238			

Mathematics

Grade	Number Tested	NCE		
		Pretest	Posttest	Gain
K	--	--	--	--
1	--	--	--	--
2	91	48.1	53.3	5.2
3	65	49.0	48.4	-0.6
4	108	47.2	59.5	12.3
5	66	53.8	55.7	1.9
6	84	53.9	51.6	-2.3
7	37	31.2	36.7	5.5
8	26	32.0	31.3	-0.7
9	17	40.4	40.0	-0.4
10	22	38.4	39.6	1.2
11	3	40.5	32.0	-8.5
12	--	--	--	--
Total	519			

Table 15 (continued)

Language Arts

Grade	Number Tested	NCE		
		Pretest	Posttest	Gain
K	--	--	--	--
1	--	--	--	--
2	12	49.9	55.0	5.1
3	8	35.8	35.6	-0.2
4	6	39.8	36.6	-3.2
5	10	40.5	40.4	-0.1
6	11	22.6	23.9	1.3
7	4	50.0	55.2	5.2
8	--	--	--	--
9	--	--	--	--
10	--	--	--	--
11	--	--	--	--
12	--	--	--	--
Total	51			

Table 16

Chapter 1 Migrant Education Achievement Results
for Students Tested on a Fall-Spring Schedule,
by Subject Area, 1987-88

Alabama

Reading

Grade	Number Tested	NCE		
		Pretest	Posttest	Gain
K	--	--	--	--
1	--	--	--	--
2	27	44.7	52.6	7.9
3	29	36.5	43.0	6.5
4	35	30.7	35.1	4.4
5	36	35.8	44.7	8.9
6	29	40.7	47.4	6.7
7	27	55.9	58.1	2.2
8	24	33.0	41.9	8.9
9	5	55.3	54.2	-1.1
10	3	21.8	35.1	13.3
11	8	50.5	54.8	4.3
12	4	13.1	42.5	29.4
Total	227			

Mathematics

Grade	Number Tested	NCE		
		Pretest	Posttest	Gain
K	--	--	--	--
1	--	--	--	--
2	33	53.6	61.6	8.0
3	33	45.3	44.6	-0.7
4	35	46.4	55.1	8.7
5	41	42.3	45.9	3.6
6	31	46.6	50.8	4.2
7	30	54.1	49.6	-4.5
8	27	34.2	36.8	2.6
9	6	40.4	44.3	3.9
10	4	30.6	38.1	7.5
11	8	60.4	53.2	-7.2
12	4	0.0	43.6	43.6
Total	252			

ALASKA

The migrant education projects in Alaska provided services to 5,961 regular term students in pre-kindergarten through grade 12. Students received services in reading, language arts, mathematics, and vocational/career education. Other instructional services were also provided, but were not specified. Supporting services included attendance, social work, and guidance; health; and pupil transportation. Other supporting services were also provided, but were not specified. During the summer term, services were provided to 517 students in pre-kindergarten through 12th grade. With the exception of vocational/career education, summer term participants received the same instructional services as those received by participants in the regular term. Other instructional services were also provided, but were not specified. Summer term participants also received tutorial services. The only supporting service provided during the summer term was pupil transportation.

During the regular term Alaska used norm-referenced testing. Alaska reported number tested and NCEs for reading, mathematics, and language arts on an annual testing cycle. Some districts used a fall-to-spring testing cycle, however, these data were not reported.

Table 17 presents pretest, posttest and gain NCEs as well as the number tested, by grade and subject area. For reading, NCE gains ranged from 2.9 (grade 11) to -3.4 (grade 2). For mathematics, gains ranged from 7.5 NCEs (grade 2) to -3.5 NCEs (grade 3). Language arts gains ranged from 3.8 NCEs (grade 5) to -1.3 NCEs (grade 2 and grade 8).

Achievement information was not provided for the summer term. However, program outcomes for the summer were based on locally-developed activity logs and self concept skills tests. Measuring program outcomes for the summer was based on teacher-judgment tests. There was no statewide assessment for measuring summer term outcomes.

Table 17

Chapter 1 Migrant Education Achievement Results for Students Tested on an Annual Schedule, by Subject Area, 1987-88

Alaska

Reading

Grade	Number Tested	NCE		
		Pretest	Posttest	Gain
K	--	--	--	--
1	--	--	--	--
2	321	39.4	36.0	-3.4
3	323	31.6	33.7	2.1
4	310	33.7	32.9	-0.8
5	293	31.8	32.2	0.4
6	273	31.8	30.2	-1.6
7	241	29.3	31.6	2.3
8	270	31.6	28.8	-2.8
9	226	29.6	29.1	-0.5
10	195	28.2	30.4	2.2
11	157	28.9	31.8	2.9
12	153	30.8	31.9	1.1
Total	2,762			

Mathematics

Grade	Number Tested	NCE		
		Pretest	Posttest	Gain
K	--	--	--	--
1	--	--	--	--
2	271	39.0	46.5	7.5
3	295	42.4	38.9	-3.5
4	302	41.2	37.8	-3.4
5	272	35.3	37.1	1.8
6	266	36.0	37.9	1.9
7	252	35.7	37.9	2.2
8	284	35.8	36.3	0.5
9	214	31.4	33.4	2.0
10	193	32.1	35.0	2.9
11	155	33.7	36.0	2.3
12	152	35.5	35.9	0.4
Total	2,656			

Table 17 (continued)

Language Arts

Grade	Number Tested	NCE		
		Pretest	Posttest	Gain
K	--	--	--	--
1	--	--	--	--
2	124	38.1	39.4	-1.3
3	127	35.5	35.3	-0.2
4	148	34.8	38.0	3.2
5	117	31.8	35.6	3.8
6	128	38.0	37.7	-0.3
7	104	38.2	39.0	0.8
8	117	38.5	37.2	-1.3
9	89	39.5	40.4	0.9
10	76	36.3	37.3	1.0
11	65	41.9	40.9	-1.0
12	66	40.4	43.2	2.8
Total	1,161			

ARIZONA

The state's migrant education projects served 12,316 regular term students in pre-kindergarten through grade 12. Instruction was provided in English to students of limited English background, reading, language arts, mathematics, and vocational/career education. Preschool, GED/HEP, handicapped, and gifted students also received instruction. Secondary tutorial services were also provided. Supporting services were provided in the areas of attendance, social work, and guidance; health; dental; nutrition; and pupil transportation. Elementary tutorial services were also provided as well as instruction in PASS (Portable Assisted Study Sequence). Services were provided to 1,537 summer term students in pre-kindergarten through grade 12. Summer term participants (including preschool and secondary tutorial) received instruction in the same subject areas as regular term students. Except for the addition of health and safety, summer term supporting services were the same as regular term supporting services.

Arizona provided a statewide summary of achievement results for migrant students in reading, language arts, and mathematics for the regular term. The scores provided were for all migrant students tested, grades 1-12, and included students who did not receive instructional services through the Migrant Education Program. A point-in-time, norm-referenced model was used. The following tests were used: Iowa Test of Basic Skills (grades 1-8), Stanford Achievement Test (grade 9), and Stanford Test of Academic Skills (grades 10-12). Testing took place in April 1988.

Table 18 provides the number tested and mean grade equivalents, by subject. Students generally performed below their grade level, especially at the secondary level.

Table 18

Mean Grade Equivalent Scores, April 1988

Arizona

Grade	Reading		Language Arts		Mathematics	
	Number Tested	Mean Grade Equivalent	Number Tested	Mean Grade Equivalent	Number Tested	Mean Grade Equivalent
1	602	1.5	570	1.7	588	1.7
2	703	2.2	679	2.6	683	2.5
3	654	3.1	625	3.5	636	3.3
4	734	4.0	719	4.3	730	4.2
5	717	4.9	714	5.1	709	5.1
6	670	5.5	669	5.9	667	6.0
7	682	6.4	674	6.7	679	7.1
8	635	7.4	625	7.8	628	7.9
9	518	7.1	515	7.2	513	8.6
10	473	7.2	473	2.8	473	8.6
11	365	7.3	362	8.5	366	9.3
12	279	9.1	274	9.5	279	9.4
Total	7,032		6,899		6,951	

ARKANSAS

Migrant education projects in this state provided services to 6,754 regular term students in pre-kindergarten through grade 12. Instructional services were provided in English to students of limited English background, reading, mathematics, vocational/career education, and health. Supporting services included attendance, social work, and guidance; health; dental; pupil transportation; clothing; school supplies; and personal supplies. Summer term services were provided to 282 students in kindergarten through grade 12. Summer term participants received instruction in reading. Supporting services included health and nutrition.

Arkansas provided pre- and post-test achievement data for migrant students in reading and mathematics for the regular term. Data were reported in NCEs for the fall-to-spring testing cycle. Achievement gains were based on pre- and post-testing performance on the Individualized Criterion Referenced Test (ICRT) Form A.

Table 19 provides pretest, posttest, and gain NCEs as well as the number tested, by subject area and grade, for participants tested on a fall-to-spring test cycle. Gains ranged from 19.0 NCEs (grade 2) to 7.0 NCEs (grade 8) in reading, and 23.0 NCEs (grade 2) to 8.0 NCEs (grade 6) in mathematics.

In addition, the ICRT M-Micro System was used to evaluate the effectiveness of the tutorial program for migrant participants who move frequently and thus are not always available for a pre- and post-test schedule. Arkansas provided counts for the number of skills gained for the time tutored in all districts for the 1987-88 school year.

Table 20 shows, by grade level, the number of children evaluated, the average number of weeks tutored, and the average number of skills gained in reading and mathematics. In reading, the highest average number of skills gained was 11 (grade 6 and grade 7). The highest average number of skills gained in mathematics was 12 (grade 7).

Achievement information was not provided for the summer term.

Table 19

Chapter 1 Migrant Education Achievement Results
for Students Tested on a Fall-Spring Schedule,
by Subject Area, 1987-88

Arkansas

Reading

Grade	Number Tested	NCE		
		Pretest	Posttest	Gain
K	--	--	--	--
1	--	--	--	--
2	271	29.0	48.0	19.0
3	213	26.0	39.0	13.0
4	240	34.0	43.0	9.0
5	215	27.0	36.0	9.0
6	153	35.0	44.0	9.0
7	57	30.0	43.0	13.0
8	37	35.0	42.0	7.0
9	--	--	--	--
10	--	--	--	--
11	--	--	--	--
12	--	--	--	--
Total	1,186			

Mathematics

Grade	Number Tested	NCE		
		Pretest	Posttest	Gain
K	--	--	--	--
1	--	--	--	--
2	187	39.0	62.0	23.0
3	144	45.0	58.0	13.0
4	165	43.0	54.0	11.0
5	157	36.0	48.0	12.0
6	113	37.0	45.0	8.0
7	43	38.0	53.0	15.0
8	41	36.0	51.0	15.0
9	--	--	--	--
10	--	--	--	--
11	--	--	--	--
12	--	--	--	--
Total	850			

Table 20

Skills Gained, 1987-88 School Year

Arkansas

Grade	Reading			Mathematics		
	Number Eval.	Average Number Weeks Tutored	Average Number Skills Gained	Number Eval.	Average Number Weeks Tutored	Average Number Skills Gained
2	39	14	8	21	14	9
3	44	15	8	31	15	10
4	38	14	7	22	12	7
5	32	13	8	19	13	7
6	12	18	11	11	15	8
7	15	15	11	8	13	12
8	10	17	9	9	17	11
Total	190			121		

CALIFORNIA

The California migrant education projects provided services to 105,095 regular term students and 45,656 summer term students in pre-kindergarten through grade 12. For both terms, participants received services in English to students of limited English background, reading, language arts, mathematics, and vocational/career education. Other instructional services were also provided, but were not specified. Supporting services included attendance, social work, and guidance; health; dental; nutrition; and pupil transportation. Other supporting services were also provided, but were not specified.

California provided pre- and post-test achievement data for reading and mathematics for the regular term for participants receiving both migrant education and state compensatory education services. Data were reported in NCEs for an annual testing cycle.

Table 21 provides pretest, posttest, and gain NCEs as well as the number tested, by subject area and grade, for participants tested on an annual test cycle. For reading, gains ranged from 3.6 NCEs (grade 2) to -2.1 NCEs (grade 12). Mathematics gains ranged from 4.4 NCEs (grade 2) to -0.8 NCEs (grade 12).

California also provided achievement data in reading, language skills, and mathematics for students who received only migrant education services. Scores were combined for participants tested in English and Spanish on both testing cycles. Pretest, posttest, and gain scores were not provided. Instead, the number and percent of participants rated at or above the 50th NCE and below the 50th NCE were provided. Table 22 provides the number at or above the 50th NCE, the number below the 50th NCE, and the number tested, by subject area and grade, for participants tested on an annual test cycle. For reading, 20 percent tested at or above the 50th NCE and 80 percent tested below the 50th NCE. For mathematics, 35 percent tested at or above the 50th NCE and 65 percent tested below the 50th NCE. For language skills, 24 percent tested at or above the 50th NCE and 76 percent tested below the 50th NCE.

California also provided criterion-referenced achievement data for students tested in reading and mathematics for the regular term, in terms of the number and percent of participants performing above and below grade level. Table 23 provides number above grade level, number below grade level, and number tested, by subject area and grade. For reading, 29 percent tested above grade level and 71 percent tested below grade level. For mathematics, 36 percent tested above grade level and 63 percent tested below grade level. For language skills, 31 percent tested above grade level and 69 percent tested below grade level.

Achievement information was not provided for the summer term.

Table 21

Achievement Results for Students Receiving Migrant Education and State Compensatory Education Services Tested on an Annual Schedule, by Subject Area, 1987-88

California

Reading

Grade	Number Tested	NCE		
		Pretest	Posttest	Gain
K	--	--	--	--
1	--	--	--	--
2	1,087	35.2	38.8	3.6
3	1,247	34.9	37.9	3.0
4	1,314	36.3	39.7	3.4
5	1,287	35.1	36.3	1.2
6	1,222	36.0	38.5	2.5
7	793	35.8	38.2	2.4
8	677	35.0	36.9	1.9
9	536	28.0	31.2	3.2
10	404	29.6	31.7	2.1
11	162	29.4	31.0	1.6
12	133	33.4	31.3	-2.1
Total	8,862			

Mathematics

Grade	Number Tested	NCE		
		Pretest	Posttest	Gain
K	--	--	--	--
1	--	--	--	--
2	983	42.8	47.2	4.4
3	1,094	43.5	45.1	1.6
4	1,188	41.8	44.2	2.4
5	1,167	39.8	43.7	3.9
6	1,103	41.4	44.2	2.8
7	705	41.3	44.1	2.8
8	591	43.6	43.9	0.3
9	463	37.5	39.0	1.5
10	353	39.9	42.3	2.4
11	138	39.6	39.9	0.3
12	105	41.5	40.7	-0.8
Total	7,890			

Table 22

Results of Testing (Tested in English and Spanish) for Migrant Education Students Using Standardized Tests and Reporting in Normal Curve Equivalents (NCEs), by Subject Area, 1987-88

California

Reading

Grade	Number Tested	Number at or Above 50th NCE	(Percent)	Number Below 50th NCE	(Percent)
1	1,904	362	(19)	1,542	(81)
2	4,210	1,203	(29)	3,007	(71)
3	4,174	1,015	(24)	3,159	(76)
4	5,054	821	(16)	4,233	(84)
5	3,923	721	(18)	3,202	(82)
6	3,907	649	(17)	3,258	(83)
7	3,565	744	(21)	2,821	(79)
8	3,213	624	(19)	2,589	(81)
9	2,099	376	(18)	1,723	(82)
10	1,714	311	(18)	1,403	(82)
11	1,428	192	(13)	1,236	(87)
12	1,082	167	(15)	915	(85)
Total	36,273	7,185	(20)	29,088	(80)

Mathematics

Grade	Number Tested	Number at or Above 50th NCE	(Percent)	Number Below 50th NCE	(Percent)
1	2,023	510	(25)	1,513	(75)
2	4,305	1,818	(42)	2,487	(58)
3	4,529	1,743	(38)	2,786	(62)
4	4,315	1,387	(32)	2,928	(68)
5	4,173	1,304	(31)	2,869	(69)
6	4,151	1,394	(34)	2,757	(66)
7	3,814	1,442	(38)	2,372	(62)
8	3,471	1,235	(36)	2,236	(64)
9	2,062	703	(34)	1,359	(66)
10	1,699	534	(31)	1,165	(69)
11	1,372	462	(34)	910	(66)
12	1,026	329	(32)	697	(68)
Total	36,940	12,861	(35)	24,079	(65)

Table 22 (continued)

Language Skills

Grade	Number Tested	Number at or Above 50th NCE	(Percent)	Number Below 50th NCE	(Percent)
1	1,187	215	(18)	972	(82)
2	2,379	511	(21)	1,868	(79)
3	3,135	682	(22)	2,453	(78)
4	3,324	722	(22)	2,602	(78)
5	3,626	865	(24)	2,761	(76)
6	3,741	886	(24)	2,855	(76)
7	3,460	1,035	(30)	2,425	(70)
8	3,183	879	(28)	2,304	(72)
9	1,943	528	(27)	1,415	(73)
10	1,627	394	(24)	1,233	(76)
11	1,290	276	(21)	1,014	(79)
12	872	208	(24)	664	(76)
Total	29,767	7,201	(24)	22,566	(76)

Table 23

Migrant Students Tested With Criterion-Referenced Tests Who Were Judged by Instructional Staff to be Above or Below Grade Level, by Subject Area, 1987-88

California

Reading

Grade	Number Tested	Number Above Grade Level	(Percent)	Number Below Grade Level	(Percent)
1	3,589	1,120	(31)	2,469	(69)
2	1,832	516	(28)	1,316	(72)
3	1,358	339	(25)	1,019	(75)
4	1,298	347	(27)	951	(73)
5	1,204	353	(29)	851	(71)
6	1,154	331	(29)	823	(71)
7	982	244	(25)	738	(75)
8	772	188	(24)	584	(76)
9	1,070	304	(28)	766	(72)
10	1,159	360	(31)	799	(69)
11	804	294	(37)	510	(63)
12	584	236	(40)	348	(60)
Total	15,806	4,632	(29)	11,174	(71)

Mathematics

Grade	Number Tested	Number Above Grade Level	(Percent)	Number Below Grade Level	(Percent)
1	3,520	1,357	(39)	2,163	(61)
2	1,761	681	(39)	1,080	(61)
3	1,383	509	(37)	874	(63)
4	1,261	446	(35)	815	(65)
5	1,254	472	(38)	782	(62)
6	1,228	477	(39)	751	(61)
7	1,073	376	(35)	697	(65)
8	884	285	(32)	599	(68)
9	1,113	425	(38)	688	(62)
10	1,186	455	(38)	731	(62)
11	855	357	(42)	498	(58)
12	1,117	310	(28)	807	(72)
Total	16,635	6,050	(36)	10,485	(63)

Table 23 (continued)

Language Skills

Grade	Number Tested	Number Above Grade Level	(Percent)	Number Below Grade Level	(Percent)
1	3,729	1,203	(32)	2,526	(68)
2	2,620	781	(30)	1,839	(70)
3	1,856	537	(29)	1,319	(71)
4	1,543	459	(30)	1,084	(70)
5	1,341	399	(30)	942	(70)
6	1,393	437	(31)	956	(69)
7	1,223	345	(28)	878	(72)
8	940	269	(29)	671	(71)
9	1,197	354	(30)	843	(70)
10	1,220	403	(33)	817	(67)
11	868	306	(35)	562	(65)
12	634	267	(42)	367	(58)
Total	18,564	5,760	(31)	12,804	(69)

COLORADO

Colorado's migrant education projects served 1,997 regular term students and 1,982 summer term students in pre-kindergarten through grade 12. For both terms, instructional services were provided in English to students of limited English background, reading, language arts, mathematics, and vocational/career education. In addition, regular and summer term participants received instruction in the following areas: computer literacy, multicultural education and health education/safety. Special activities were also provided for regular and summer term participants. In addition, summer term participants received instruction in physical education, swimming, drivers education, arts and crafts, music, outdoor education, science, and social studies. Tutorial services were provided to secondary students in both the regular term and the summer term. Also, preschool, gifted, handicapped, and PASS (Portable Assisted Study Sequence) participants received instructional services for both terms. Supporting services, provided during both terms, included attendance, social work, and guidance; health; dental; nutrition; pupil transportation; clothing; needs assessment; pupil services; home visits; emergency housing assistance; food stamps; glasses; etc. Support for at-risk participants was also provided. During the summer GED participants received instruction.

Colorado provided pre- and post-test achievement data for reading and mathematics for the regular term. Data were reported in NCEs for the fall-to-spring and annual testing cycles for settled-out students who participated in the regular school year program. Settled-out students are migrant children who resided in a district for a continuous twelve-month period. The tests used were based on the discretion of the program directors. The Individualized Test of Basic Skills (ITBS) and the Comprehensive Test of Basic Skills (CTBS) were two tests that were most commonly used.

Table 24 provides pretest, posttest, and gain NCEs, as well as the number tested, by subject area and grade, for participants tested on an annual cycle. Participants tested in reading showed NCE gains ranging from 26.0 (kindergarten) to -0.3 (grade 7). Mathematics gains ranged from 7.8 NCEs (grade 2) to -2.1 NCEs (grade 9).

Table 25 provides pretest, posttest, and gain NCEs, as well as the number tested, by subject area and grade, for participants tested on a fall-to-spring test cycle. For reading, NCE gains ranged from 11.1 (grade 10) to -2.9 (grade 9). For mathematics, NCE gains ranged from 9.6 (grade 5) to -17.0 (grade 11).

In addition, criterion-referenced tests were used for reading and mathematics during the summer term as well as for active migrant participants during the regular year. Most districts used the Brigance Test.

Table 26 provides the test used, number of students tested, average number of instruction hours per week, and an average number of skills mastered. During the regular term, there were 648 participants tested in reading and 389 tested in mathematics. For the regular term, students mastered an average of 12.5 reading skills and 5.8 mathematics skills.

Table 27 provides the test used, number of students tested, average number of instruction hours per week, and an average number of skills mastered. During the summer term, there were 1,695 participants tested in reading and 1,230 tested in mathematics. For the summer term, 5.6 reading skills and 4.1 mathematics skills were mastered.

Table 24

Chapter 1 Migrant Education Achievement Results
for Students Tested on an Annual Schedule,
by Subject Area, 1987-88

Colorado

Reading

Grade	Number Tested	NCE		
		Pretest	Posttest	Gain
K	2	40.2	66.2	26.0
1	16	30.8	34.8	4.0
2	12	25.9	29.9	4.0
3	17	28.6	34.4	5.8
4	21	34.3	36.6	2.3
5	21	42.3	47.8	5.5
6	20	33.8	37.7	3.9
7	17	45.0	44.7	-0.3
8	9	38.6	38.4	-0.2
9	6	34.4	37.0	2.6
10	7	31.6	32.0	0.4
11	--	--	--	--
12	--	--	--	--
Total	148			

Mathematics

Grade	Number Tested	NCE		
		Pretest	Posttest	Gain
K	--	--	--	--
1	13	32.0	35.4	3.4
2	12	30.3	38.1	7.8
3	14	28.0	31.4	3.4
4	20	34.8	35.6	0.8
5	15	42.5	44.0	1.5
6	11	35.1	34.0	-1.1
7	13	32.5	38.3	5.8
8	7	40.3	44.4	4.1
9	8	34.6	32.5	-2.1
10	4	29.2	34.2	5.0
11	--	--	--	--
12	--	--	--	--
Total	117			

Table 25

Chapter 1 Migrant Education Achievement Results
for Students Tested on a Fall-Spring Schedule,
by Subject Area, 1987-88

Colorado

Reading

Grade	Number Tested	NCE		
		Pretest	Posttest	Gain
K	14	39.3	44.0	4.7
1	47	45.0	47.2	2.2
2	54	34.9	41.2	6.3
3	54	38.3	43.9	5.6
4	52	34.6	41.0	6.4
5	29	34.3	38.8	4.5
6	22	37.1	40.2	3.1
7	20	36.4	40.1	3.7
8	17	27.2	38.2	11.0
9	11	26.8	23.9	-2.9
10	2	33.7	44.8	11.1
11	2	35.0	41.1	6.1
12	--	--	--	--
Total	324			

Mathematics

Grade	Number Tested	NCE		
		Pretest	Posttest	Gain
K	7	39.0	29.9	-9.1
1	44	37.2	40.8	3.6
2	47	37.9	44.6	6.7
3	40	39.6	43.3	3.7
4	39	36.5	45.5	9.0
5	30	41.9	51.5	9.6
6	26	46.8	52.0	5.2
7	21	41.3	43.6	2.3
8	9	39.0	40.6	1.6
9	7	36.4	45.1	8.7
10	2	54.0	54.0	0.0
11	1	36.0	19.0	-17.0
12	--	--	--	--
Total	273			

Table 26

Chapter 1 Migrant Education Achievement Results for Criterion-Referenced Testing for the Regular Term, by Subject Area -- 1987-88

Colorado

	Reading	Mathematics
Number of Students Tested	648	389
Average Hours of Instruction Per Week	2.2	1.5
Average Number of Skills Mastered	12.5	5.8

Table 27

Chapter 1 Migrant Education Achievement Results for Criterion-Referenced Testing for the Summer Term, by Subject Area -- 1987-88

Colorado

	Reading	Mathematics
Number of Students Tested	1,695	1,230
Average Hours of Instruction Per Week	7.2	6.0
Average Number of Skills Mastered	5.6	4.1

CONNECTICUT

Migrant education projects in this state served 3,864 regular term students in pre-kindergarten through grade 12. Instructional services were provided in English to students of limited English background, reading, language arts, mathematics, vocational/career education, and ethnic arts. Regular term high school students also received tutoring. Supporting services included attendance, social work, and guidance; health; dental; nutrition; and pupil transportation. Other supporting services were also provided, but were not specified. Three hundred and fifty-nine (359) pre-kindergarten through twelfth grade summer term students were provided services. The instructional and supporting services were the same as those offered during the regular term.

Connecticut provided pre- and post-test achievement data for the regular term for reading, language arts, and mathematics. Data were reported in NCEs for annual and fall-to-spring testing cycles.

Table 28 provides pretest, posttest, and gain NCEs as well as the number tested, by subject area and grade, for participants tested on an annual test cycle. Reading gains ranged from 12.4 NCEs (grade 9) to -9.1 NCEs (grade 11). Mathematics gains ranged from 45.0 NCEs (grade 11) to -8.7 NCEs (grade 2). For language arts, NCE gains ranged from 19.4 (grade 11) to -24.0 (grade 12).

Table 29 provides pretest, posttest, and gain NCEs as well as the number tested, by subject area and grade, for participants tested on a fall-to-spring test cycle. Reading gains ranged from 10.0 NCEs (grade 3) to 2.7 NCEs (grade 2 and grade 8). Mathematics gains ranged from 22.0 NCEs (grade 3) to 6.0 NCEs (grade 9). Participants tested in language arts had NCE gains ranging from 37.0 (grade 9) to 3.6 (grade 7).

No achievement data for the summer term were provided.

Table 28

Chapter 1 Migrant Education Achievement Results
for Students Tested on an Annual Schedule,
by Subject Area, 1987-88

Connecticut

Reading

Grade	Number Tested	NCE		
		Pretest	Posttest	Gain
K	--	--	--	--
1	--	--	--	--
2	32	43.1	46.6	3.5
3	70	44.1	41.7	-2.4
4	58	36.5	39.6	3.1
5	83	37.1	37.0	-0.1
6	75	35.4	39.4	4.0
7	61	37.5	41.6	4.1
8	55	35.1	38.3	3.2
9	3	25.3	37.7	12.4
10	6	29.0	37.9	8.9
11	2	39.0	29.9	-9.1
12	2	51.1	45.9	-5.2
Total	447			

Mathematics

Grade	Number Tested	NCE		
		Pretest	Posttest	Gain
K	--	--	--	--
1	--	--	--	--
2	5	63.0	54.3	-8.7
3	17	33.1	50.3	17.2
4	14	37.4	53.8	16.4
5	11	44.5	42.0	-2.5
6	17	40.3	43.9	3.6
7	10	42.4	45.6	3.2
8	9	53.9	54.2	0.3
9	1	27.2	30.7	3.5
10	3	15.0	52.0	37.0
11	1	17.0	62.0	45.0
12	--	--	--	--
Total	88			

Table 28 (continued)

Language Arts

Grade	Number Tested	NCE		
		Pretest	Posttest	Gain
K	--	--	--	--
1	--	--	--	--
2	19	57.5	56.4	-1.1
3	43	51.3	50.8	-0.5
4	38	46.9	49.7	2.8
5	56	51.1	49.3	-1.8
6	51	46.1	51.8	5.7
7	45	49.9	50.2	0.3
8	40	51.3	52.9	1.6
9	2	40.1	39.0	-1.1
10	2	30.7	43.6	12.9
11	1	1.0	20.4	19.4
12	1	37.1	13.1	-24.0
Total	298			

Table 29

Chapter 1 Migrant Education Achievement Results
for Students Tested on a Fall-Spring Schedule,
by Subject Area, 1987-88

Connecticut

Reading

Grade	Number Tested	NCE		
		Pretest	Posttest	Gain
K	--	--	--	--
1	--	--	--	--
2	29	29.4	32.1	2.7
3	25	24.7	34.7	10.0
4	7	31.4	37.7	6.3
5	13	32.4	37.0	4.6
6	11	39.9	43.3	3.4
7	3	34.8	44.4	9.6
8	7	27.2	29.9	2.7
9	--	--	--	--
10	2	7.0	10.0	3.0
11	--	--	--	--
12	2	1.0	10.0	9.0
Total	99			

Mathematics

Grade	Number Tested	NCE		
		Pretest	Posttest	Gain
K	--	--	--	--
1	--	--	--	--
2	9	34.0	44.0	10.0
3	2	26.0	48.0	22.0
4	1	37.0	54.0	17.0
5	--	--	--	--
6	1	43.0	57.0	14.0
7	--	--	--	--
8	--	--	--	--
9	5	23.0	29.0	6.0
10	--	--	--	--
11	--	--	--	--
12	--	--	--	--
Total	18			

Table 29 (continued)

Language Arts

Grade	Number Tested	NCE		
		Pretest	Posttest	Gain
K	--	--	--	--
1	--	--	--	--
2	10	35.0	40.0	5.0
3	5	33.0	47.0	14.0
4	--	--	--	--
5	4	46.0	62.0	16.0
6	5	22.6	28.4	5.8
7	5	22.7	26.3	3.6
8	6	18.8	31.0	12.2
9	3	17.0	54.0	37.0
10	--	--	--	--
11	--	--	--	--
12	--	--	--	--
Total	38			

DELAWARE

Delaware's migrant education projects served 168 regular term students in kindergarten through grade 12. Participants received services in English to students of limited English background, reading, language arts, and mathematics. Elementary and secondary tutorial services were also provided. Supporting services included attendance, social work, and guidance; nutrition; and pupil transportation. Summer term services were provided to 394 students in kindergarten through grade 12. Instructional services were the same as those provided during the regular term, with the addition of vocational/career education. Also preschool and GED/HEP participants received instruction. In addition, secondary tutorial services were provided. Supporting services included attendance, social work, and guidance; health; dental; nutrition; and pupil transportation.

A study was made of Delaware's migrant student population based on the CTBS scores of May, 1988. Delaware presented the data graphically--the scores and number tested were not provided numerically. Delaware provided information depicting the migrant students' standings, compared to the state average and national average. The data were reported on an annual cycle. According to the graphs, migrant participants tested in reading scored below the state norm in all grades and below the national norm in all grades except grades 1 and 2. Migrant participants tested in language scored below the state norm, but above the national norm in all grades, except grade 11. Migrant participants tested in mathematics scored below the state norm, but above the national norm in all grades except grades 9-11.

During the regular school year, Delaware's migrant education projects supplemented the regular classroom instruction. Participants were instructed in areas of weakness as indicated by their regular classroom teacher. Thus, no separate achievement data specific to the supplementary instruction were available other than skills mastery.

During the six-week summer term, all migrant projects used the norm-referenced Stanford Diagnostic Test in reading and mathematics. No testing results were provided.

DISTRICT OF COLUMBIA

The District of Columbia's migrant education projects served 89 regular term students in pre-kindergarten through grade 12. Students were instructed in writing. Supporting services included attendance, social work, and guidance; health; nutrition; and parent involvement. Nineteen participants in pre-kindergarten through grade 2 and grades 4, 6, 7 and 8 were served during the summer term. Instruction was provided in reading and writing. Supporting services included nutrition and parent involvement.

According to District of Columbia Department of Education staff, only a small number (17) of students' scores could be found in the system's data bank due to either omission by the schools or the absence of student identification numbers that may have prevented entering the student's test scores into the computer system.

During the regular term, the District of Columbia provided individual level CBC data for the 17 participants with valid scores. The CBC is a locally-developed, criterion-referenced test. On average, the participants were performing 1.6 years below their grade level in reading and 1.4 years below grade level in mathematics.

No achievement data were provided during the summer term.

FLORIDA

The migrant education projects in Florida provided services to 18,631 regular term students in pre-kindergarten through grade 12. Instruction was provided in English to students of limited English background, reading, language arts, mathematics and vocational/career education. Regular term preschool participants also received instructional services. Also, secondary school participants received tutorial services. Supporting services included attendance, social work, and guidance; health; dental; nutrition; and pupil transportation. Services were provided to 624 summer term students in pre-kindergarten through grade 12. Instruction was provided in reading and mathematics. Summer term preschool participants also received instructional services. In addition, secondary school participants received tutorial services. Summer supporting services were the same as those offered during the regular term.

Florida provided pre- and post-test achievement data for reading, mathematics, and language arts for the regular term. Data were reported in NCEs for an annual testing cycle. The following norm-referenced tests were used: Comprehensive Test of Basic Skills (CTBS), California Achievement Test (CAT), Stanford Achievement Test (SAT), Metropolitan Achievement Test (MAT), Science Research Associates (SRA), and the Iowa Test of Basic Skills (ITBS).

Table 30 provides pretest, posttest, and gain NCEs as well as the number tested, by subject area and grade, for participants tested on an annual test cycle. NCE gains ranged from 2.2 (grade 6) to -0.5 (grade 2) for reading, 4.7 (grade 7) to 2.7 (grade 3) for mathematics, and 9.8 (grade 2) to -0.2 (grade 3) for language arts.

No achievement data were provided for the summer term.

Table 30

Chapter 1 Migrant Education Achievement Results
for Students Tested on an Annual Schedule,
by Subject Area, 1987-88

Florida

Reading

Grade	Number Tested	NCE		
		Pretest	Posttest	Gain
K	--	--	--	--
1	--	--	--	--
2	224	36.5	36.0	-0.5
3	505	32.3	33.0	0.7
4	457	33.0	35.0	2.0
5	457	33.2	34.0	0.8
6	387	30.8	33.0	2.2
7	170	30.0	31.0	1.0
8	60	29.5	31.0	1.5
9	--	--	--	--
10	--	--	--	--
11	--	--	--	--
12	--	--	--	--
Total	2,260			

Mathematics

Grade	Number Tested	NCE		
		Pretest	Posttest	Gain
K	--	--	--	--
1	--	--	--	--
2	62	39.0	43.0	4.0
3	93	37.3	40.0	2.7
4	74	35.0	39.0	4.0
5	77	36.1	40.0	3.9
6	66	35.6	39.0	3.4
7	88	34.3	39.0	4.7
8	27	34.4	39.0	4.6
9	--	--	--	--
10	--	--	--	--
11	--	--	--	--
12	--	--	--	--
Total	487			

Table 30 (continued)

Language Arts

Grade	Number Tested	NCE		
		Pretest	Posttest	Gain
K	--	--	--	--
1	--	--	--	--
2	32	32.2	42.0	9.8
3	93	33.2	33.0	-0.2
4	98	31.0	36.0	5.0
5	79	34.1	36.0	1.9
6	80	33.5	35.0	1.5
7	98	30.0	32.0	2.0
8	80	33.7	35.0	1.3
9	--	--	--	--
10	--	--	--	--
11	--	--	--	--
12	--	--	--	--
Total	560			

GEORGIA

Georgia's migrant education projects served 4,626 regular term students and 2,356 summer term students in pre-kindergarten through grade 12. Instruction, for both terms, was provided in English to students of limited English background, reading, language arts, mathematics, and outdoor education. General tutoring was also provided. For both terms, supporting services included attendance, social work, and guidance; health; dental; nutrition; pupil transportation; and clothing.

Georgia provided pre- and post-test achievement data for the regular term for reading and mathematics.

Table 31 provides pretest, posttest, and gain NCEs as well as the number tested, by subject area and grade, for participants served by the migrant program and tested on an annual cycle. In reading, NCE gains ranged from 23.0 (grade 1) to -3.7 (grade 9). For mathematics, NCE gains ranged from 15.0 (grade 9) to -10.0 (grade 10).

Data were also reported that compares NCE gains for students who were served and those unserved by the migrant program. Table 32 provides reading and math gains as well as the number tested, by subject area and grade, for students served and not served by the migrant program and tested on an annual cycle. For reading, gains were higher for students who were served in grades 1, 3, 4, 6, 7, and 9 than for students who were unserved. In mathematics, gains were higher for students who were served in grades 2, 3, 4, 7, 8, and 9 than for students who were unserved.

Georgia also compared the achievement of students served by the migrant education program to state averages and to students not receiving MEP services. The Iowa Tests of Basic Skills (ITBS) is administered in grades 2, 4, and 7. The Test of Achievement and Proficiency (TAP) is administered in grade 9. In all subjects and grades, students receiving MEP services scored lower than migrant students not receiving services and the general student population, indicating that the MEP program is targeted to the most educationally disadvantaged students. (Tables 33 and 34)

Table 31

Chapter 1 Migrant Education Achievement Results for Migrant Students Served and Tested on an Annual Schedule, by Subject Area, 1987-88

Georgia

Reading

Grade	Number Tested	NCE		
		Pretest	Posttest	Gain
K	--	--	--	--
1	3	21.7	44.7	23.0
2	17	40.0	41.8	1.8
3	18	36.7	37.0	0.3
4	13	36.1	40.9	4.8
5	24	48.7	49.1	0.4
6	15	40.7	40.6	-0.1
7	17	38.9	37.9	-1.0
8	14	38.8	38.5	-0.3
9	12	42.0	38.3	-3.7
10	--	--	--	--
11	--	--	--	--
12	--	--	--	--
Total	133			

Mathematics

Grade	Number Tested	NCE		
		Pretest	Posttest	Gain
K	--	--	--	--
1	4	28.0	35.8	7.8
2	34	37.9	51.7	13.8
3	35	38.9	34.2	-4.7
4	46	39.6	44.5	4.9
5	39	45.8	41.9	-3.9
6	14	38.9	34.5	-4.4
7	17	37.7	40.5	2.8
8	16	36.7	39.4	2.7
9	3	22.7	37.7	15.0
10	3	50.7	40.7	-10.0
11	--	--	--	--
12	--	--	--	--
Total	211			

Table 32

Comparison of Migrant Students NCE Gains
(Served and Unserved), for Students Tested on an
Annual Schedule, by Subject Area, 1987-88

Georgia

Grade	Reading Gain (Served)	Reading Gain (Unserved)	Math Gain (Served)	Math Gain (Unserved)
1	23.0	11.7	7.8	23.5
2	1.8	4.8	13.8	12.9
3	0.3	-0.6	-4.7	-9.7
4	4.8	1.6	4.9	4.8
5	0.4	2.3	-3.9	-3.3
6	-0.1	-7.2	-4.4	0.2
7	-1.1	-2.8	2.8	1.5
8	-0.3	4.1	2.7	2.1
9	-3.7	-7.7	15.0	0.2
10	--	-7.3	-10.0	--
Total	0.8	1.2	2.1	0.9
Total # Tested	133	221	211	127

Table 33

Percentile of Migrant Students, by Grade and Instructional Area, Spring 1988

Georgia

Subtest	2nd Grade MEP Served Percentile (155)[a/]	4th Grade MEP Served Percentile (145)	7th Grade MEP Served Percentile (85)	9th Grade MEP Served Percentile (21)
Listening	43			
Word Analysis	45			
Vocabulary	40	25	19	
Reading	32	26	25	23
L1 Spelling	39	35	27	
L2 Capitalization	54	40	35	
L3 Punctuation	60	45	34	
L4 Usage	48	31	31	
Language Total	51	36	31	18
W1 Visual Material	36	34	31	
W2 References	43	33	30	
Work-Study Total	40	34	31	21
M1 Concepts	52	46	31	
M2 Problems	47	31	28	
M3 Computation	62	43	33	
Math Total	53	40	30	17
Science	40	44	35	26
Social Studies	47	38	27	21
Composite	43	30	26	19

a/ The numbers in parentheses indicate the number tested.

Table 34

Percentile of Migrant Students Served, Migrant Students Unserved and State Average, by Grade and Instructional Area, Spring 1988

Georgia

Subject/Grade	Migrant MEP Served	Migrant UnServed	State Average
Reading			
2nd Grade	32	61	62
4th Grade	25	38	52
7th Grade	25	41	51
9th Grade	23	43	51
Language			
2nd Grade	51	66	73
4th Grade	36	41	61
7th Grade	31	45	54
9th Grade	18	46	54
Mathematics			
2nd Grade	53	78	73
4th Grade	40	49	62
7th Grade	30	47	54
9th Grade	17	42	47
Composite			
2nd Grade	43	68	69
4th Grade	30	39	58
7th Grade	26	42	54
9th Grade	19	44	52

IDAHO

During the regular term, Idaho's migrant education projects served 2,898 students in kindergarten through grade 12. Participants received instructional services in English to students of limited English background, reading, language arts, mathematics, and vocational/career education. Other instructional services were also provided, but were not specified. Supporting services included attendance, social work, and guidance; health; dental; nutrition; and pupil transportation. Other supporting services were also provided, but were not specified. During the summer term, services were provided to 1,309 students in pre-kindergarten through grade 12. The same instructional and supporting services provided in the regular term were provided in the summer term. In addition, summer term participants received instruction in art, music, P.E., and affective domain.

Based on norm-referenced tests, Idaho provided pre- and post-test achievement data for reading, mathematics, language arts, and English as a second language for the regular term. Data were reported in NCEs for the fall-to-spring and annual testing cycles. Each district chose what test to use. Some of the tests used included the Iowa Test of Basic Skills (ITBS), the Comprehensive Test of Basic Skills (CTBS), the Science Research Associates (SRA), and the California Achievement Test (CAT).

Table 35 provides pretest, posttest, and gain NCEs, as well as the number tested, by subject area and grade, for participants tested on an annual test cycle. For reading, the range of NCE gain scores was 6.5 (grade 7) to -2.6 (grade 8). In mathematics, the gains ranged from 13.8 NCEs (grade 9) to -7.5 NCEs (grade 8). For language arts, the NCE gain scores ranged from 9.0 (grade 7) to -11.2 (grade 8). In English as a second language, NCE gains ranged from 67.0 (grade 10) to -6.0 (grade 8).

Table 36 provides pretest, posttest, and gain NCEs as well as the number tested, by subject area and grade, for participants tested on a fall-to-spring test cycle. In reading, NCE gains ranged from 13.1 (grade 9) to -3.3 (grade 7). In mathematics, NCE gains ranged from 12.7 (grade 8) to -5.3 (grade 7). In language arts, NCE gains ranged from 25.1 (grade 2) to 3.7 (grade 7). In English as a second language, NCE gains ranged from 34.5 (grade 11) to 6.4 (grade 6).

There were no statewide achievement data provided for the summer term. However, criterion-referenced tests measuring skills mastered were given at the discretion of the district. Results from a summer reading program were collected, but not aggregated.

Table 35

Chapter 1 Migrant Education Achievement Results
for Students Tested on an Annual Schedule,
by Subject Area, 1987-88

Idaho

Reading

Grade	Number Tested	NCE		
		Pretest	Posttest	Gain
K	--	--	--	--
1	--	--	--	--
2	105	35.1	38.0	2.9
3	68	34.4	37.4	3.0
4	67	32.9	36.5	3.6
5	51	38.8	39.7	0.9
6	22	38.6	40.1	1.5
7	13	31.2	37.7	6.5
8	5	29.4	26.8	-2.6
9	6	45.7	47.8	2.1
10	--	--	--	--
11	1	1.0	1.0	0.0
12	--	--	--	--
Total	338			

Mathematics

Grade	Number Tested	NCE		
		Pretest	Posttest	Gain
K	--	--	--	--
1	--	--	--	--
2	63	40.6	41.3	0.7
3	40	37.6	39.2	1.6
4	40	39.8	41.1	1.3
5	36	38.1	46.2	8.1
6	30	40.6	42.0	1.4
7	10	37.0	31.0	-6.0
8	4	30.3	22.8	-7.5
9	4	54.2	68.0	13.8
10	1	46.0	42.0	-4.0
11	--	--	--	--
12	--	--	--	--
Total	228			

Table 35 (continued)

Language Arts

Grade	Number Tested	NCE		
		Pretest	Posttest	Gain
K	--	--	--	--
1	--	--	--	--
2	6	35.8	43.8	8.0
3	8	28.5	35.1	6.6
4	17	31.6	35.3	3.7
5	6	38.8	41.7	2.9
6	14	37.4	41.8	4.4
7	9	29.7	38.7	9.0
8	4	24.2	13.0	-11.2
9	4	50.5	52.0	1.5
10	1	43.0	50.0	7.0
11	--	--	--	--
12	--	--	--	--
Total	69			

English as a Second Language

Grade	Number Tested	NCE		
		Pretest	Posttest	Gain
K	--	--	--	--
1	--	--	--	--
2	15	63.8	80.1	16.3
3	8	70.8	82.6	11.8
4	5	71.7	89.8	18.1
5	6	51.2	67.3	16.1
6	5	47.4	47.2	-0.2
7	3	58.7	61.3	2.6
8	4	35.8	29.8	-6.0
9	2	35.0	70.0	35.0
10	1	8.0	75.0	67.0
11	--	--	--	--
12	--	--	--	--
Total	49			

Table 36

Chapter 1 Migrant Education Achievement Results
for Students Tested on a Fall-Spring Schedule,
by Subject Area, 1987-88

Idaho

Reading

Grade	Number Tested	NCE		
		Pretest	Posttest	Gain
K	--	--	--	--
1	--	--	--	--
2	50	35.0	43.4	8.4
3	25	32.6	35.4	2.8
4	29	32.7	41.0	8.3
5	33	29.2	37.8	8.6
6	38	34.4	36.1	1.7
7	12	40.1	36.8	-3.3
8	14	19.7	25.4	5.7
9	6	25.9	39.0	13.1
10	--	--	--	--
11	--	--	--	--
12	--	--	--	--
Total	207			

Mathematics

Grade	Number Tested	NCE		
		Pretest	Posttest	Gain
K	--	--	--	--
1	--	--	--	--
2	22	39.6	47.8	8.2
3	24	34.0	33.9	-0.1
4	28	33.2	40.8	7.6
5	19	40.1	45.1	5.0
6	36	33.1	41.5	8.4
7	10	47.9	42.6	-5.3
8	3	40.0	52.7	12.7
9	5	12.4	16.4	4.0
10	--	--	--	--
11	--	--	--	--
12	1	6.0	7.0	1.0
Total	148			

Table 36 (continued)

Language Arts

Grade	Number Tested	NCE		
		Pretest	Posttest	Gain
K	--	--	--	--
1	--	--	--	--
2	9	27.2	52.3	25.1
3	11	32.8	46.5	13.7
4	4	31.0	41.8	10.8
5	21	37.1	45.6	8.5
6	13	30.5	42.0	11.5
7	9	39.4	43.1	3.7
8	8	24.4	28.5	4.1
9	2	20.5	30.5	10.0
10	--	--	--	--
11	--	--	--	--
12	--	--	--	--
Total	77			

English as a Second Language

Grade	Number Tested	NCE		
		Pretest	Posttest	Gain
K	--	--	--	--
1	--	--	--	--
2	24	54.9	67.3	12.4
3	28	49.3	81.2	31.9
4	15	46.1	63.9	17.8
5	14	59.8	69.8	10.0
6	11	62.5	68.9	6.4
7	7	26.7	37.9	11.2
8	9	40.3	52.6	12.3
9	3	9.3	27.7	18.4
10	4	54.9	65.5	10.6
11	2	37.0	71.5	34.5
12	1	19.0	35.0	16.0
Total	118			

ILLINOIS

The migrant education projects in Illinois served 7[illegible]9 regular term students and 2,060 summer term students in pre-kindergarten through grade 1[illegible] For both terms, instructional services were provided in English to students of limited En[illegible]ish background, reading, language arts, mathematics, and vocational/career education. Other in[illegible]tructional services included the following: sign language, computers, physical education, social studies, science, art, music, geography, library skills, and cultural development. For both [illegible]erms, supporting services included attendance, social work, and guidance; health; dental; [illegible]utrition; and pupil transportation. Participants, from both terms, also received bloo[illegible] pressure screening, and visual referrals, and went on field trips.

Statewide achievement data are collected from the Self Asse[illegible]sment Questionnaire (SAQ). Illinois migrant project staff report the number of students by grade level not meeting standards and those who are meeting/exceeding standards in four basi[illegible] skill areas (English to limited English background, reading, other language arts, and mathema[illegible]tics).

Tables 37 and 38 present, for the regular and summer terms, respectively, the number and percent of the participants judged by the staff as meeting and/or exceeding standards, by subject area and grade.

Local projects established their own standards and criteria for succes[illegible]. Most projects used a variety of teacher-made tests, standardized achievement measures, checklists and observation to assess student performance. Standardized instruments projects report using included:

Stanford Achievement Test
WRAT/Peabody
Hoffman Audio/Visual Test
Bilingual Syntax Measure
Addison-Wesley Math Series
DMI Math
EPSF
Dolch Spelling List

During the regular term the majority of the students met and/or exceeded the standards. For English to limited English background, the percent meeting and/or exceed[illegible]g standards ranged from 100 percent (grade 12) to 0 percent (pre-kindergarten). For reading the percent meeting and/or exceeding standards ranged from 100 percent (grade 12 and ungraded) to 25 percent (grade 11). For language arts, the percent meeting and/or exceedin[illegible] standards ranged from 100 percent (grade 12) to 74 percent (grade 3). For mathematics, the percent meeting and/or exceeding standards ranged from 100 percent (grade 12) to 50 percent (ungraded).

During the summer term, the majority of students also met and/or exceeded the established standards. For English to limited English background, the percent meeting and/or exceeding standards ranged from 90 percent (grade 11) to 0 percent (ungraded). For reading, the percent meeting and/or exceeding standards ranged from 80 percent (grade 9 and grade 11) to 0 percent (ungraded). For language arts, the percent meeting and/or exceeding standards ranged from 88 percent (grade 11) to 0 percent (ungraded). For mathematics, the percent meeting and/or exceeding standards ranged from 92 percent (grade 11) to 10 percent (ungraded).

Table 37
Achievement Data for the Regular Term
School Year 1987-1988

Illinois

English to Limited English Background

Grade	Number Assessed by Staff	Number Meeting and/or Exceeding Standards	(Percent)
PreK	4	0	(0)
K	42	25	(60)
1	84	56	(67)
2	54	34	(63)
3	54	30	(56)
4	38	20	(53)
5	41	28	(68)
6	33	26	(79)
7	39	32	(82)
8	35	31	(89)
9	15	10	(67)
10	12	9	(75)
11	5	2	(40)
12	2	2	(100)
UG*	2	1	(50)
Total	460	306	(67)

Reading

Grade	Number Assessed by Staff	Number Meeting and/or Exceeding Standards	(Percent)
PreK	--	--	(--)
K	38	27	(71)
1	72	58	(81)
2	71	49	(69)
3	72	50	(69)
4	50	29	(58)
5	43	36	(84)
6	38	33	(87)
7	42	36	(86)
8	34	29	(85)
9	12	9	(75)
10	6	4	(67)
11	4	1	(25)
12	1	1	(100)
UG*	2	2	(100)
Total	485	364	(75)

* Ungraded

Table 37 (continued)

Language Arts

Grade	Number Assessed by Staff	Number Meeting and/or Exceeding Standards	(Percent)
PreK	--	--	(--)
K	23	20	(87)
1	50	46	(92)
2	48	40	(83)
3	38	28	(74)
4	26	20	(77)
5	38	29	(76)
6	24	19	(79)
7	25	24	(96)
8	23	22	(96)
9	12	11	(92)
10	9	8	(89)
11	4	3	(75)
12	1	1	(100)
UG*	--	--	(--)
Total	321	271	(84)

Mathematics

Grade	Number Assessed by Staff	Number Meeting and/or Exceeding Standards	(Percent)
PreK	--	--	(--)
K	36	30	(83)
1	58	46	(79)
2	57	42	(74)
3	62	39	(63)
4	47	28	(60)
5	52	43	(83)
6	41	32	(78)
7	47	40	(85)
8	38	31	(82)
9	12	10	(83)
10	6	5	(83)
11	4	3	(75)
12	1	1	(100)
UG*	2	1	(50)
Total	463	351	(76)

* Ungraded

Table 38
Achievement Data for the Summer Term, 1988

Illinois

English to Limited English Background

Grade	Number Assessed by Staff	Number Meeting and/or Exceeding Standards	(Percent)
PreK	182	101	(55)
K	179	127	(71)
1	173	131	(76)
2	130	99	(76)
3	140	99	(71)
4	95	75	(79)
5	81	63	(78)
6	77	59	(77)
7	65	54	(83)
8	54	43	(80)
9	21	14	(67)
10	18	12	(67)
11	10	9	(90)
12	12	8	(67)
UG*	7	0	(0)
Total	1,244	894	(72)

Reading

Grade	Number Assessed by Staff	Number Meeting and/or Exceeding Standards	(Percent)
PreK	219	135	(62)
K	221	145	(66)
1	260	189	(73)
2	237	175	(74)
3	217	145	(67)
4	161	121	(75)
5	177	138	(78)
6	142	112	(79)
7	98	77	(79)
8	79	58	(73)
9	51	41	(80)
10	26	18	(69)
11	15	12	(80)
12	20	13	(65)
UG*	10	0	(0)
Total	1,933	1,379	(71)

* Ungraded

Table 38 (continued)

Language Arts

Grade	Number Assessed by Staff	Number Meeting and/or Exceeding Standards	(Percent)
PreK	222	156	(70)
K	219	147	(67)
1	253	179	(71)
2	237	185	(78)
3	217	157	(72)
4	162	119	(73)
5	157	126	(80)
6	129	104	(81)
7	94	73	(78)
8	75	50	(67)
9	44	36	(82)
10	26	20	(77)
11	26	23	(88)
12	21	14	(67)
UG*	10	0	(0)
Total	1,892	1,389	(73)

Mathematics

Grade	Number Assessed by Staff	Number Meeting and/or Exceeding Standards	(Percent)
PreK	186	132	(71)
K	198	141	(71)
1	261	189	(72)
2	237	181	(76)
3	217	159	(73)
4	163	124	(76)
5	177	139	(79)
6	142	109	(77)
7	98	77	(79)
8	70	49	(70)
9	41	23	(56)
10	19	10	(53)
11	12	11	(92)
12	13	7	(54)
UG*	10	1	(10)
Total	1,844	1,352	(73)

* Ungraded

INDIANA

Indiana's migrant education projects served 2,434 regular term students in pre-kindergarten through grade 12. Instruction was provided in English to students of limited English background, reading, language arts, mathematics, vocational/career education, and health education/safety. Instructional services were also provided to regular term preschool and handicapped participants. Regular term secondary school participants received tutorial services. Also, regular term participants received books as part of RIF (Reading Is Fundamental) and participated in special activities. Supporting services included attendance, social work, and guidance; health; dental; nutrition; pupil transportation; and needs assessment. Indiana's summer term program served 2,080 students in pre-kindergarten through grade 12. Participants received instructional services in reading, language arts, mathematics, vocational/career education, and health education/safety, and multi-cultural education in special activities. Participants at both the elementary and secondary levels received tutorial services. Summer term participants also participated in RIF (Reading Is Fundamental). The supporting services provided in the summer term were the same as those provided during the regular term.

Indiana utilized a point-in-time evaluation model. At the beginning of the 1987-88 school year, point-in-time assessment was initiated for participants in grades 2-9 in fall projects. Participants in grades 3, 5, 7, and 9 during the summer term were considered for testing. The following criteria were used to screen students for inclusion in both assessments: students must have sufficient English proficiency to understand test directions and items, and students must perform at no more than one level below the test publisher's recommended level for children of that age and time of testing.

Although the same grade levels are assessed each summer, the aforementioned criteria precluded ninth graders from qualifying for participation prior to 1986, and ninth grade scores were not available for summer, 1984 or summer, 1985.

Table 39 provides the results of the point-in-time assessment initiated in 1987 for fall projects, displaying the number tested and the NCE average by grade and subject matter. Average NCEs in total mathematics exceeded those for total reading and reading comprehension. Second graders did particularly well in total mathematics and reading comprehension.

Table 40 presents the NCE scores in reading comprehension from the summer term point-in-time assessment for the summers of 1984, 1985, 1986, 1987, and 1988. NCE scores have fluctuated with, for example, a high of 30.5 in 1984 and a low of 22.9 in 1988 for grade 3. Participants tested in grade 7 had the highest score in the summer of 1988.

Table 41 presents, by grade, the NCE scores in total reading and total mathematics from the 1988 summer term point-in-time assessment. The highest NCE scores were reported for total mathematics (grade 7).

Table 39

Point-in-Time Assessment, Fall 1987

Indiana

Grade	Reading Comprehension		Total Reading		Total Mathematics	
	Number Tested	NCE Average	Number Tested	NCE Average	Number Tested	NCE Average
2	19	43.7	38	32.2	27	55.7
3	33	26.7	35	23.8	34	42.2
4	27	36.8	27	36.6	28	43.8
5	29	34.3	29	31.8	30	40.7
6	39	34.3	39	32.5	39	41.0
7	33	19.9	33	24.4	34	32.4
8	17	27.7	17	27.2	17	37.5
9	19	29.8	19	30.1	19	44.4
Total	216		237		228	

Table 40
Point-in-Time Assessment, Summer 1984-1988

Indiana

	NCE Scores - Reading Comprehension						
	Grade 3		Grade 5		Grade 7		
	Number Tested	NCE	Number Tested	NCE	Number Tested	NCE	Total Number Tested
1988	13	22.9	16	33.9	8	56.4	37
1987	21	30.1	16	33.3	6	33.3	43
1986	28	27.9	18	34.2	10	33.6	56
1985	42	29.9	23	34.8	5	36.8	70
1984	26	30.5	10	30.5	10	43.2	46

Table 41

Point-in-Time Assessment, Summer 1988

Indiana

Grade	Number Tested	NCE Scores - Total Reading
3	13	21.6
5	17	28.6
7	8	18.6
Total	38	

Grade	Number Tested	NCE Scores - Total Mathematics
3	13	34.3
5	18	42.8
7	11	44.3
Total	42	

IOWA

The migrant education projects in Iowa provided services to 139 regular term students in pre-kindergarten through grade 12. Instructional services were provided in English to students of limited English background, reading, language arts, and mathematics. Other instructional services were also provided, but were not specified. Regular term supporting services were not provided. There was no summer term program.

For the regular term, participants in migrant education projects in four school districts were tested using norm-referenced achievement tests near the fall and spring norming dates. According to information reported in the State Performance Report, four LEAs provided the evaluation data which could be aggregated for grades 1-12. Of the 118 students in the program at the time evaluation data were submitted, 76 had valid pretest and posttest scores. The following standardized tests were used: Houghton Mifflin Language Assessment Battery (LAB), Iowa Test of Basic Skills (ITBS), Iowa Test of Educational Development (ITED), Metropolitan Achievement Test (MAT), and the Toronto Test of Receptive Vocabulary. The students with valid scores demonstrated an aggregate gain of 1.6 NCEs. Iowa did not present the NCE data by subject or by grade.

Sixty percent of the kindergartners from one migrant site were pretested and posttested with the Peabody Picture Vocabulary Test. The results showed an average gain of 1 year 7 months in mental age.

KANSAS

The migrant education projects in Kansas served 4,282 regular term students in pre-kindergarten through grade 12. Instructional services were provided in English to students of limited English background, reading, language arts, and mathematics. Other instructional services were also provided, but were not specified. Supporting services included attendance, social work, and guidance; health; dental; nutrition; pupil transportation; and needs assessment. The summer term projects provided services to 913 students in pre-kindergarten through grade 12. Summer term participants received instructional services in English to students of limited English background, reading, language arts, mathematics, and vocational/career education. Supporting services were provided in attendance, social work, and guidance; health; dental; nutrition; pupil transportation, and needs assessment.

Kansas used a norm-referenced model to evaluate local migrant projects and encouraged the projects to use the Individualized Criterion Referenced Test. The State Performance Report provided information on the number tested and the average gains reported in reading and mathematics for a fall-to-spring testing cycle.

Table 42 presents gain NCEs as well as the number tested, by grade and subject area. For reading, gains ranged from 27.3 NCEs (grade 1) to -1.0 NCEs (grade 9). For mathematics, NCE gains ranged from 28.0 (kindergarten) to -3.3 (grade 6).

Summer achievement data were provided using a Rating Scale of Student Progress. District level data were provided but could not be aggregated, because scores were not provided consistently by subject or grade. For example, some districts combined reading and mathematics, while others provided separate scores. A total of 297 participants were tested in reading and 141 were tested in mathematics. Students were given a pre-rating and a post-rating. The pre-rating ranged from 0 (unable to do) to 3 (mostly able to do). The post-rating ranged from 0 (unable to do) to 4 (well able to do).

Table 42
NCE Gain Scores for Students Tested on a
Fall-Spring Schedule, by Subject Area, 1987-88

Kansas

Reading

Grade	Number Tested	Average NCE Gain
K	10	1.3
1	124	27.3
2	153	25.1
3	130	22.5
4	100	16.5
5	69	17.5
6	41	13.2
7	31	3.9
8	21	4.6
9	6	-1.0
10	3	10.7
11	3	11.7
12	3	24.3
UG*	4	20.3
Total	698	

Mathematics

Grade	Number Tested	Average NCE Gain
K	7	28.0
1	8	5.1
2	8	17.5
3	7	7.6
4	13	11.9
5	11	9.6
6	3	-3.3
7	6	14.5
8	1	7.0
9	--	--
10	--	--
11	--	--
12	--	--
UG*	2	2.0
Total	66	

* Ungraded

KENTUCKY

In Kentucky, migrant education services were provided to 2,694 regular term students in kindergarten through grade 12. Instructional services were provided in reading, language arts, mathematics, and vocational/career education. Supporting services included attendance, social work, and guidance; health; dental; and nutrition. Services were provided to 286 summer term students in pre-kindergarten through grade 10. Instructional services included language arts, mathematics, vocational/career education, and fine arts. The supporting services provided during the regular term were also provided during the summer term. Pupil transportation was also provided during the summer term.

During the 1987-88 regular term, Kentucky elected to use a point-in-time norm-referenced assessment approach. The Kentucky Essential Skills Test Form N was administered between May 2-6, 1988. Students were tested in reading, mathematics, language, spelling, and research, library, and reference.

Table 43 provides the number tested and mean NCE score by subject area and grade, for participants tested between May 2-6, 1988. Mean NCE scores ranged from 54.9 (grade 3) to 28.1 (grade 12) for reading. In mathematics, the mean NCE scores ranged from 68.3 (grade 2) to 40.0 (grade 12), in language the mean NCE scores ranged from 53.3 (grade 3) to 40.3 (grade 12), and in spelling the mean NCE scores ranged from 54.3 (grade 3) to 42.4 (grade 11). Mean NCE scores for research, library, and reference ranged from 50.8 (grade 6) to 41.6 (grade 10).

No achievement data were provided for the summer term. According to the SEA, it was difficult to measure program outcomes during the summer because of the variety of programs that were offered. The programs concentrated more on improving student attitudes than instruction.

Table 43

Chapter 1 Migrant Education Achievement Results for Students Tested Using a Point-in-Time Assessment Approach, by Subject Area, May 2-6, 1988

Kentucky

Reading

Grade	Number Tested	NCE Mean Score
K	--	--
1	207	47.1
2	220	45.5
3	231	54.9
4	185	47.6
5	234	45.6
6	204	51.0
7	207	47.5
8	159	50.6
9	106	41.6
10	70	37.4
11	39	40.2
12	20	28.1
Total	1,882	

Mathematics

Grade	Number Tested	NCE Mean Score
K	--	--
1	207	62.1
2	220	68.3
3	231	51.6
4	185	50.2
5	234	53.9
6	204	56.4
7	207	52.1
8	159	51.3
9	106	49.3
10	70	48.5
11	39	44.8
12	20	40.0
Total	1,882	

Table 43 (continued)

Language

Grade	Number Tested	NCE Mean Score
K	--	--
1	--	--
2	220	49.6
3	231	53.3
4	185	44.5
5	234	50.2
6	204	50.4
7	207	51.3
8	159	52.7
9	106	47.2
10	70	45.2
11	39	45.3
12	20	40.3
Total	1,675	

Spelling

Grade	Number Tested	NCE Mean Score
K	--	--
1	--	--
2	220	44.2
3	231	54.3
4	185	48.4
5	234	50.4
6	204	50.3
7	207	49.1
8	159	52.7
9	106	46.8
10	70	44.1
11	39	42.4
12	20	43.3
Total	1,675	

Table 43 (continued)

Research, Library, and Reference

Grade	Number Tested	NCE Mean Score
K	--	--
1	--	--
2	--	--
3	--	--
4	185	43.8
5	234	48.1
6	204	50.8
7	207	50.3
8	159	50.0
9	106	48.9
10	70	41.6
11	39	42.1
12	20	42.6
Total	1,224	

LOUISIANA

Migrant education projects in this state provided services to 5,689 regular term students in pre-kindergarten through grade 12. Instructional services were provided in English to students of limited English background, reading, language arts, mathematics, computer literacy, science, and social studies. Supporting services included attendance, social work, and guidance; health; dental; and pupil transportation. Services were not provided during the summer term.

Louisiana provided NCE achievement data by currently and formerly migrant status. The majority of Louisiana's migrant education participants tested were formerly migrant. Data were reported on both an annual and fall-spring schedule. Tests used included the Science Research Associates (SRA) test, California Achievement Test (CAT), and the Comprehensive Test of Basic Skills (CTBS).

Table 44 provides achievement results for currently migrant students tested on an annual schedule. For currently migrant participants tested on an annual cycle, reading scores ranged from 12.6 NCEs (grade 10) to -2.3 NCEs (grade 8), while mathematics scores ranged from 14.1 NCEs (grade 1) to -9.9 NCEs (grade 8). In language arts, NCE scores ranged from 10.1 (grade 3) to -16.8 (grade 4) .

Table 45 provides achievement results for currently migrant students tested on a fall-spring schedule. In reading, NCE gains ranged from 7.5 (grade 3) to 0.1 (grade 5). Mathematics gains ranged from 10.5 NCEs (grade 4) to -2.2 NCEs (grade 2).

Table 46 presents achievement data for formerly migrant participants tested on an annual schedule. This category contains the largest number of participants tested. Reading scores ranged from 3.3 NCEs (grade 11) to -5.2 NCEs (grade 10). Annual mathematics NCE gains were generally larger than reading gains, ranging from 12.4 (grade 1) to -4.7 (grade 2). Language arts scores ranged from 6.5 NCEs (grade 10) to -9.1 NCEs (grade 1).

Table 47 presents achievement data for formerly migrant participants tested on a fall-spring schedule. Scores for formerly migrant participants tested on a fall-spring cycle-ranged from 12.1 NCEs (grade 1) to -1.8 NCEs (grade 6) in reading. Mathematics NCE scores were generally higher, ranging from 12.0 (grade 9) to 0.3 (grade 8).

Table 44

Chapter 1 Migrant Education Achievement Results
for Currently Migrant Students Tested on an
Annual Schedule, by Subject Area, 1987-88

Louisiana

Reading

Grade	Number Tested	NCE		
		Pretest	Posttest	Gain
K	--	--	--	--
1	26	37.8	46.2	8.4
2	36	42.1	39.9	-2.2
3	25	42.7	48.8	6.1
4	23	38.4	40.5	2.1
5	33	39.1	38.7	-0.4
6	26	33.9	35.4	1.5
7	27	45.0	44.6	-0.4
8	12	31.9	29.6	-2.3
9	7	46.1	50.4	4.3
10	3	31.6	44.2	12.6
11	2	35.7	41.2	5.5
12	--	--	--	--
Total	220			

Mathematics

Grade	Number Tested	NCE		
		Pretest	Posttest	Gain
K	--	--	--	--
1	13	35.8	49.9	14.1
2	22	49.0	50.6	1.6
3	18	40.3	48.6	8.3
4	19	36.9	49.8	12.9
5	22	40.1	47.8	7.7
6	18	39.9	41.9	2.0
7	20	56.7	56.2	-0.5
8	9	48.4	38.5	-9.9
9	7	53.2	51.2	-2.0
10	2	60.0	63.6	3.6
11	--	--	--	--
12	--	--	--	--
Total	150			

Table 44 (continued)

Language Arts

Grade	Number Tested	NCE		
		Pretest	Posttest	Gain
K	--	--	--	--
1	8	38.9	44.1	5.2
2	5	50.5	49.0	-1.5
3	8	35.1	45.2	10.1
4	5	41.6	24.8	-16.8
5	9	46.1	41.7	-4.4
6	4	22.7	21.1	-1.6
7	9	48.7	45.9	-2.8
8	8	28.8	29.9	1.1
9	5	29.4	22.5	-6.9
10	2	45.1	41.7	-3.4
11	2	51.9	52.1	0.2
12	--	--	--	--
Total	65			

Table 45

Chapter 1 Migrant Education Achievement Results
for Currently Migrant Students Tested on a
Fall-Spring Schedule, by Subject Area, 1987-88

Louisiana

Reading

Grade	Number Tested	NCE		
		Pretest	Posttest	Gain
K	--	--	--	--
1	22	39.8	40.6	0.8
2	36	36.8	42.3	5.5
3	40	35.0	42.5	7.5
4	44	39.6	41.9	2.3
5	38	44.1	44.2	0.1
6	25	40.0	41.2	1.2
7	7	33.1	36.1	3.0
8	19	27.8	32.1	4.3
9	--	--	--	--
10	--	--	--	--
11	--	--	--	--
12	--	--	--	--
Total	231			

Mathematics

Grade	Number Tested	NCE		
		Pretest	Posttest	Gain
K	--	--	--	--
1	15	44.0	48.9	4.9
2	29	47.4	45.2	-2.2
3	24	36.7	42.3	5.6
4	26	46.0	56.5	10.5
5	29	44.1	47.6	3.5
6	21	42.2	47.6	5.4
7	9	51.3	54.1	2.8
8	19	41.6	44.9	3.3
9	9	42.0	45.0	3.0
10	5	72.0	76.0	4.0
11	3	74.0	83.0	9.0
12	--	--	--	--
Total	189			

Table 46

Chapter 1 Migrant Education Achievement Results for Formerly Migrant Students Tested on an Annual Schedule, by Subject Area, 1987-88

Louisiana

Reading

Grade	Number Tested	NCE		
		Pretest	Posttest	Gain
K	--	--	--	--
1	104	38.7	39.3	0.6
2	212	46.7	45.2	-1.5
3	205	38.3	39.3	1.0
4	179	40.3	42.2	1.9
5	192	41.6	43.1	1.5
6	162	40.8	41.4	0.6
7	123	41.6	43.3	1.7
8	91	41.7	44.4	2.7
9	52	43.2	39.0	-4.2
10	36	45.8	40.6	-5.2
11	24	41.3	44.6	3.3
12	2	38.5	41.5	3.0
Total	1,382			

Mathematics

Grade	Number Tested	NCE		
		Pretest	Posttest	Gain
K	--	--	--	--
1	52	40.1	52.5	12.4
2	173	52.3	47.6	-4.7
3	172	44.5	47.0	2.5
4	180	45.6	51.8	6.2
5	159	42.4	51.0	8.6
6	151	44.0	46.3	2.3
7	102	47.6	47.4	-0.2
8	84	49.8	49.7	-0.1
9	50	55.5	55.0	-0.5
10	34	48.1	57.7	9.6
11	17	53.5	54.4	0.9
12	2	41.0	45.5	4.5
Total	1,176			

Table 46 (continued)

Language Arts

Grade	Number Tested	NCE		
		Pretest	Posttest	Gain
K	--	--	--	--
1	45	45.0	35.9	-9.1
2	47	43.5	45.9	2.4
3	47	44.0	44.2	0.2
4	30	37.8	42.8	5.0
5	61	44.3	46.4	2.1
6	29	37.4	41.3	3.9
7	48	49.3	45.7	-3.6
8	35	52.9	48.7	-4.2
9	15	42.4	37.9	-4.5
10	18	43.5	50.0	6.5
11	8	48.3	47.2	-1.1
12	--	--	--	--
Total	383			

Table 47

Chapter 1 Migrant Education Achievement Results
for Formerly Migrant Students Tested on a
Fall-Spring Schedule, by Subject Area, 1987-88

Louisiana

Reading

Grade	Number Tested	NCE		
		Pretest	Posttest	Gain
K	--	--	--	--
1	46	43.4	55.5	12.1
2	59	33.7	38.8	5.1
3	45	32.1	35.5	3.4
4	63	36.1	37.5	1.4
5	78	36.2	38.8	2.6
6	61	36.6	34.8	-1.8
7	45	47.8	52.0	4.2
8	28	44.6	46.6	2.0
9	--	--	--	--
10	--	--	--	--
11	--	--	--	--
12	--	--	--	--
Total	425			

Mathematics

Grade	Number Tested	NCE		
		Pretest	Posttest	Gain
K	--	--	--	--
1	30	46.2	58.0	11.8
2	51	41.3	47.7	6.4
3	53	37.1	46.7	9.6
4	57	41.2	48.4	7.2
5	68	34.4	46.3	11.9
6	53	42.2	48.4	6.2
7	44	45.6	49.7	4.1
8	23	46.5	46.8	0.3
9	10	48.0	60.0	12.0
10	9	64.0	68.0	4.0
11	11	80.0	87.0	7.0
12	5	66.0	70.0	4.0
Total	414			

MAINE

During the regular term, Maine's migrant education projects served 3,695 students in kindergarten through grade 12. Participants received instructional services in English to students of limited English background, reading, language arts, mathematics, vocational/career education, and health and safety education. Regular term instructional services were also provided to gifted and talented participants. Regular term participants also received tutorial services. Supporting services included attendance, social work, and guidance; and pupil transportation. Supporting services for the handicapped were also provided. During the summer term, services were provided to 295 migrant education students in pre-kindergarten through grade 8. Summer instructional services included reading, language arts, mathematics, health and safety education, and multi-cultural education. Summer term participants also received tutorial services. Supporting services included attendance, social work, and guidance; health; dental; and pupil transportation.

Maine provided pre- and post-test achievement data for reading and mathematics for the regular term. Data were reported in NCEs for the fall-to-spring and annual testing cycles.

Table 48 provides pretest, posttest, and gain NCEs as well as the number tested, by subject area and grade, for the annual testing cycle. NCE gains for reading ranged from 11.4 (grade 9) to -0.6 (grade 8 and grade 11). For participants tested in mathematics, gains ranged from 15.4 NCEs (grade 9) to -0.2 NCEs (grade 5).

Table 49 provides pretest, posttest, and gain NCEs, and the number tested, by subject area and grade, for the fall-to-spring testing cycle. NCE gains for reading ranged from 18.0 (grade 1) to -0.6 (grade 6). For participants tested in mathematics, gains ranged from 9.1 NCEs (grade 3) to -1.4 NCEs (grade 8).

Maine is developing a method of measuring program outcomes for the summer term.

Table 48

Chapter 1 Migrant Education Achievement Results
for Students Tested on an Annual Schedule,
by Subject Area, 1987-88

Maine

Reading

Grade	Number Tested	NCE		
		Pretest	Posttest	Gain
K	--	--	--	--
1	--	--	--	--
2	59	52.8	54.6	1.8
3	73	49.3	49.8	0.5
4	82	56.5	56.0	-0.5
5	68	48.9	51.9	3.0
6	65	50.0	50.8	0.8
7	88	45.4	47.9	2.5
8	83	48.4	47.8	-0.6
9	10	44.7	56.1	11.4
10	23	50.3	52.3	2.0
11	10	54.7	54.1	-0.6
12	15	42.4	47.9	5.5
Total	576			

Mathematics

Grade	Number Tested	NCE		
		Pretest	Posttest	Gain
K	--	--	--	--
1	--	--	--	--
2	49	57.5	57.4	-0.1
3	66	50.9	51.2	0.3
4	79	51.9	54.3	2.4
5	59	52.3	52.1	-0.2
6	69	48.0	49.9	1.9
7	86	45.5	49.3	3.8
8	75	45.7	46.3	0.6
9	6	38.3	53.7	15.4
10	24	42.8	47.2	4.4
11	20	42.5	44.4	1.9
12	10	46.4	46.6	0.2
Total	543			

Table 49

Chapter 1 Migrant Education Achievement Results
for Students Tested on a Fall-Spring Schedule,
by Subject Area, 1987-88

Maine

Reading

Grade	Number Tested	NCE		
		Pretest	Posttest	Gain
K	--	--	--	--
1	102	33.3	51.3	18.0
2	41	47.8	51.5	3.7
3	58	47.5	55.2	7.7
4	56	48.2	52.7	4.5
5	46	47.6	55.1	7.5
6	32	49.6	49.0	-0.6
7	27	50.6	51.9	1.3
8	43	50.0	53.0	3.0
9	25	43.7	50.6	6.9
10	36	46.3	50.7	4.4
11	31	45.7	51.1	5.4
12	59	51.7	56.8	5.1
Total	556			

Mathematics

Grade	Number Tested	NCE		
		Pretest	Posttest	Gain
K	--	--	--	--
1	49	45.5	48.8	3.3
2	35	47.3	52.4	5.1
3	36	44.3	53.4	9.1
4	30	45.4	52.2	6.8
5	30	51.5	52.7	1.2
6	22	47.5	49.0	1.5
7	18	43.4	48.3	4.9
8	29	51.7	50.3	-1.4
9	21	38.5	43.3	4.8
10	24	48.5	51.2	2.7
11	17	45.9	47.6	1.7
12	3	33.7	38.0	4.3
Total	314			

MARYLAND

Migrant education projects in Maryland provided services to 19 regular term students in pre-kindergarten through grade 7. Instructional services were provided in English to students of limited English background, language arts, mathematics, and vocational/career education. Preschool participants also received instruction. Supporting services included attendance, social work, and guidance; nutrition; and pupil transportation. Services were provided to 670 summer term students in pre-kindergarten through grade 12. Summer instructional services included the following: English to students of limited English background, reading, language arts, mathematics, and vocational/career education. Preschool and GED/HEP participants also received instruction. Secondary students also received tutorial services. Summer supporting services included attendance, social work, and guidance; health; dental; nutrition; and pupil transportation.

During the summer term, Maryland used The 3 R's Test Classroom Edition, a basic skills test. The pre- and post-tests were administered outside of the norm testing period, but gave a diagnostic assessment of student academic capabilities based on a limited skill set. Language is not a separate subtest for grades 1 and 2. The information is summarized for students with 20 or more days of instruction. Maryland only reports NCE data by composite score and not by subject, therefore the data are reported in raw scores. Composite NCE scores will be submitted for 1988-89.

Table 50 provides an average raw score (pre and post), and the difference as well as the number tested, by subject area and grade for the summer term. In reading, the difference between the average raw score (pre and post) ranged from 2.9 (grade 5) to 0.2 (grade 7). For mathematics, the difference between the average raw score (pre and post) ranged from 2.4 (grade 1) to 1.1 (grade 3 and grade 6). In language arts, the difference between the average raw score (pre and post) ranged from 2.4 (grade 7) to -0.3 (grade 6).

No achievement information was provided for the regular term.

Table 50

3 R's Test Results by Average Raw Score (Pre and Post), by Subject Area, Summer 1988

Maryland

Reading

Grade	Number Tested	Average Raw Score		
		Pretest	Posttest	Difference
1	50	11.3	12.6	1.3
2	35	11.8	12.9	1.1
3	31	10.2	11.6	1.4
4	25	11.1	11.9	0.8
5	24	7.7	10.6	2.9
6	11	10.6	11.5	0.9
7	14	10.3	10.5	0.2
Total	190			

Mathematics

Grade	Number Tested	Average Raw Score		
		Pretest	Posttest	Difference
1	50	11.3	13.7	2.4
2	34	11.9	13.9	2.0
3	31	7.3	8.4	1.1
4	25	7.6	9.0	1.4
5	23	6.5	8.0	1.5
6	11	7.1	8.2	1.1
7	14	6.7	8.3	1.6
Total	188			

Table 50 (continued)

Language Arts

Grade	Number Tested	Average Raw Score		
		Pretest	Posttest	Difference
1	--	--	--	--
2	--	--	--	--
3	28	6.7	8.4	1.7
4	21	8.2	10.0	1.8
5	20	6.8	8.4	1.6
6	9	9.0	8.7	-0.3
7	10	6.6	9.0	2.4
Total	88			

MASSACHUSETTS

The migrant education projects in Massachusetts provided services to 2,958 regular term students and 3,627 summer term students in pre-kindergarten through grade 12. Participants in both terms received services in English to students of limited English background, reading, mathematics, and vocational/career education. Tutorial services were also provided to secondary students. Preschool participants also received instructional services. Supporting services for both terms included attendance, social work, and guidance; health; dental; nutrition; and pupil transportation.

Massachusetts did not provide achievement data for the 1987-88 school year. According to the SEA, the Massachusetts Migrant Education Program (MMEP) is in a transition period. The program is moving away from its mastery learning model that uses skills as the measured unit of student progress, toward a program of instruction that adopts a whole language perspective. Although the approach is believed to be far more beneficial to student learning and growth, its current weakness rests in the lack of appropriate aggregate measures of learning. Thus, the MMEP will not be able to report achievement data in some areas until the assessment issues have been resolved.

MICHIGAN

Michigan's migrant education projects provided services to 8,381 regular term students and 8,231 summer term students in pre-kindergarten through grade 12. For both terms, instructional services were provided in English to students of limited English background, reading, language arts, mathematics, vocational/career education, and multi-cultural education. Secondary students received tutorial services for both terms. Preschool participants in both terms received instructional services. Supporting services during the regular term and the summer term included attendance, social work, and guidance; health; nutrition; pupil transportation; and needs assessment. Dental services were also provided during the summer term. Also at-risk participants in both terms received supporting services.

Michigan did not provide achievement data.

MINNESOTA

Migrant education projects in this state provided services to 572 regular term students and 3,268 summer term students in pre-kindergarten through grade 12. Participants received instructional services in English to students of limited English background, reading, language arts, mathematics, and health. Also, elementary and secondary students received tutoring, and preschool, gifted, GED, and handicapped students received instructional services. In addition, some students participated in PASS (Portable Assisted Study Sequence) and special activities. Except for language arts, summer term participants received services in the same areas as regular term participants. In addition, summer term students received vocational/career education. For both terms, supporting services included attendance, social work, and guidance; health; dental; nutrition; and pupil transportation. Also, summer term at-risk students were provided services.

Using criterion-referenced testing, Minnesota reported estimated achievement gains made by participants in kindergarten through grade 8 who attended summer projects in 1988. For reading, students in kindergarten to 2nd or 3rd grade used the Sing, Spell, Read, and Write lesson plan, but were not tested. Second through eighth graders used the McMillan Series R=Basal test. For mathematics, grades 1-8 used the Individualized Computational Skills Program. Language arts students, K through 8, were tested using Individualized Developmental Education Activities.

Tables 51 through 53 present the numbers of students achieving gains in language, reading, and mathematics, respectively. In oral language, gains were stated in terms of objectives mastered. Sixty-five percent of the participants tested in language mastered three or more objectives. In reading, gains were expressed in terms of months (where reading one book equals one month gain, reading two books equals two months gain, etc.). A majority of participants (80 percent) tested in reading gained at least one month. In mathematics, gains were also expressed in terms of months (where completion of skill levels is equated with gains in terms of months). Almost all of the participants tested in mathematics (94 percent) gained at least one month in mathematics skills.

Testing was not done during the regular term.

Table 51

Estimated Achievement Gains in Language by Objectives Mastered, Summer 1988

Minnesota

	Number Tested	Percent Mastering Objectives
5 objectives	7	2%
4 objectives	69	20%
3 objectives	157	43%
2 objectives	73	20%
1 objectives	56	15%
Total	362	

Table 52

Estimated Achievement Gains in Reading in Months, Summer 1988[a/]

Minnesota

	Number Tested	Percent Achieving Gains
3 months or more	36	6%
2 months	48	8%
1 month	376	66%
Less than 1 month	117	20%
Total	577	

a/ Reading one book equals one month gain, reading two books equals two months gain, etc.

Table 53

Estimated Achievement Gains in Mathematics in Months, Summer 1988[a/]

Minnesota

	Number Tested	Percent Achieving Gains
3 months or more	59	8%
2 months	172	24%
1 month	450	62%
Less than 1 month	45	6%
Total	726	

a/ Completion of skill levels (addition, multiplication, etc.) is equated with gains in terms of months. The number of months gained varies.

MISSISSIPPI

Mississippi's migrant education projects provided services to 3,853 regular term students in pre-kindergarten through grade 12. Instructional services were provided in reading, language arts, and mathematics. Supporting services included attendance, social work, and guidance, and health. There was no summer term program.

Using norm-referenced tests, Mississippi provided pre- and post-test achievement data for reading, mathematics, and language arts for the regular term. Data were reported in NCEs for all subjects for the fall-to-spring and annual testing cycles.

The following tests were used: CAT (California Achievement Test), ICRT (Individual Criterion Referenced Test), CTBS (Comprehensive Test of Basic Skills), SAT (Stanford Achievement Test), and SRA Achievement Test (Science Research Associates).

Table 54 provides pretest, posttest, and gain NCEs, as well as the number tested, by subject area and grade, for participants tested on an annual test cycle. For reading, NCE gains ranged from 28.0 (grade 1) to -3.9 (grade 9). For mathematics, the gains ranged from 18.1 NCEs (grade 1) to -14.0 NCEs (grade 12). For language arts, NCE gains ranged from 31.8 (grade 3) to -27.0 (grade 12).

Table 55 provides pretest, posttest, and gain NCEs, as well as the number tested, by subject area and grade, for participants tested on a fall-to-spring test cycle. For reading, NCE gains ranged from 14.8 (grade 1) to -0.3 (kindergarten). For mathematics, the gains ranged from 16.0 NCEs (grade 12) to -17.7 NCEs (kindergarten). For language arts, NCE gains ranged from 37.0 (grade 6) to 12.0 (grade 8 and grade 9).

Table 54

Chapter 1 Migrant Education Achievement Results
for Students Tested on an Annual Schedule,
by Subject Area, 1987-88

Mississippi

Reading

Grade	Number Tested	NCE		
		Pretest	Posttest	Gain
K	--	--	--	--
1	20	23.1	51.1	28.0
2	86	51.3	50.1	-1.2
3	93	40.9	46.0	5.1
4	82	40.4	42.5	2.1
5	82	44.5	45.6	1.1
6	79	41.4	45.4	4.0
7	69	38.2	39.8	1.6
8	41	47.6	48.3	0.7
9	13	39.6	35.7	-3.9
10	7	37.4	35.4	-2.0
11	8	24.7	26.6	1.9
12	4	39.1	38.3	-0.8
Total	584			

Mathematics

Grade	Number Tested	NCE		
		Pretest	Posttest	Gain
K	1	37.7	50.0	12.3
1	14	32.6	50.7	18.1
2	41	46.1	52.2	6.1
3	44	43.4	44.6	1.2
4	54	40.3	44.4	4.1
5	48	44.3	44.3	0.0
6	35	41.1	42.0	0.9
7	26	44.1	44.0	-0.1
8	15	47.1	50.6	3.5
9	3	41.0	47.0	6.0
10	2	29.5	37.0	7.5
11	2	45.0	39.0	-6.0
12	1	75.0	61.0	-14.0
Total	286			

Table 54 (continued)

Language Arts

Grade	Number Tested	NCE		
		Pretest	Posttest	Gain
K	1	30.0	43.0	13.0
1	3	33.0	63.3	30.3
2	11	51.6	64.4	12.8
3	19	11.2	43.0	31.8
4	16	55.8	38.0	-17.8
5	38	43.3	47.3	4.0
6	16	43.1	44.4	1.3
7	20	57.9	53.9	-4.0
8	14	38.2	39.1	0.9
9	3	30.7	35.0	4.3
10	6	47.9	53.2	5.3
11	4	43.8	41.8	-2.0
12	1	52.0	25.0	-27.0
Total	152			

Table 55

Chapter 1 Migrant Education Achievement Results
for Students Tested on a Fall-Spring Schedule,
by Subject Area, 1987-88

Mississippi

Reading

Grade	Number Tested	NCE		
		Pretest	Posttest	Gain
K	3	41.3	41.0	-0.3
1	13	39.7	54.5	14.8
2	29	35.7	49.6	13.9
3	32	35.2	40.8	5.6
4	45	33.8	40.6	6.8
5	45	33.7	37.3	3.6
6	39	32.4	38.8	6.4
7	44	14.0	26.7	12.7
8	24	22.4	28.4	6.0
9	15	28.1	30.8	2.7
10	8	34.0	35.0	1.0
11	7	23.0	24.0	1.0
12	1	33.0	33.0	0.0
Total	305			

Mathematics

Grade	Number Tested	NCE		
		Pretest	Posttest	Gain
K	3	47.7	30.0	-17.7
1	10	54.3	59.2	4.9
2	23	56.4	53.1	-3.3
3	21	40.1	44.5	4.4
4	33	39.9	49.9	10.0
5	28	40.9	48.1	7.2
6	19	44.9	51.3	6.4
7	37	33.3	35.1	1.8
8	17	32.0	40.1	8.1
9	10	32.6	39.0	6.4
10	8	47.3	41.3	-6.0
11	7	34.5	34.4	-0.1
12	1	39.0	55.0	16.0
Total	217			

Table 55 (continued)

Language Arts

Grade	Number Tested	NCE		
		Pretest	Posttest	Gain
K	--	--	--	--
1	--	--	--	--
2	--	--	--	--
3	11	10.0	46.0	36.0
4	17	24.0	44.0	20.0
5	19	1.0	37.0	36.0
6	13	4.0	41.0	37.0
7	19	21.0	34.0	13.0
8	14	34.0	46.0	12.0
9	6	27.0	39.0	12.0
10	9	9.0	34.0	25.0
11	3	1.0	20.0	19.0
12	--	--	--	--
Total	111			

MISSOURI

Migrant education projects in Missouri provided services to 1,485 regular term students in pre-kindergarten through grade 12. Participants received instructional services in English to students of limited English background, reading, language arts, mathematics, and vocational/career education. Tutorial services were provided to secondary students. Preschool participants also received instructional services. Supporting services included attendance, social work, and guidance; health; dental; nutrition; pupil transportation; and library services. During the summer term, services were provided to 438 students in pre-kindergarten through grade 12. Instructional services included reading, language arts, and mathematics. Preschool participants also received instructional services. Supporting services provided in the summer term were the same as those provided in the regular term.

Missouri provided a statewide achievement summary which reported information for the following programs: preschool, elementary basic skills, career development, hands-on vocational, and English as a second language. The testing instruments used for school year 1987-88 were a locally-constructed rating scale and the Brigance Diagnostic Inventories. The testing schedule for both the regular term and the summer term included a pretest of selected skills during the first week of the project followed by periodic posttests and pre- and post-tests of new skills during the term. The measure of achievement -- the average percent of gain scores -- was a ratio of what the participants actually gained to what they should have gained.

Table 56 summarizes number tested and the range of average percentage of gain for each program model for the regular term and for the summer term. Because most of Missouri's achievement report included average percentages of gain for different subject areas within each program model, average percentages of gain in this table are presented as ranges.

For the regular term preschool program, the highest average percent of gain reported was in cognitive skills (69 percent). The lowest average percent of gain reported was in social development skills (60 percent). For the summer term preschool program, the highest average percent gained was in gross motor skills and fine motor skills (50 percent). The lowest average percent gained was in cognitive skills (25 percent).

For the regular term elementary basic skills program, the highest average percent gained was 65 percent (mathematics skills). The lowest average percent gained was in social development skills (54 percent). For the summer basic skills programs (school-based), the highest average percent gained was 60 percent (mathematics skills) and the lowest was 48 percent (oral language skills).

Within the career development program, the average percent of gains ranged from 76 percent (career development skills) to 58 percent (social development skills). The gains made by participants of the hands-on vocational program ranged from 47 percent (social development skills) to 38 percent (vocational skills).

For the English as a second language program, the average percent of gains ranged from 54 percent (oral language skills) to 48 percent (reading skills).

Tables 57 and 58 provide the program, number tested, average number of objectives mastered, and average percent of gain by subject for the regular and summer terms, respectively.

For the regular term, the highest average percentage of gain was 66 percent (oral language skills-career development program). For the summer term, the highest average percentage of gain was 60 percent (mathematics-elementary basic skills (school-based)).

Table 56

Average Percentage of Gain by Term and by Program Model, School Year 1987-1988

Missouri

Program	Regular Term		Summer Term	
	Fall 1987-Spring 1988		Summer 1988-Summer 1988	
	Number Tested	Range of Average Percent of Gain	Number Tested	Range of Average Percent of Gain
Preschool program	91	69% - 60%	150	50% - 25%
Elementary basic skills (school-based)	735	65% - 54%	150	60% - 48%
Career development program	95	76% - 58%	--	--
Hands-on vocational program	33	47% - 38%	--	--
English as a second language	8	54% - 48%	--	--
Total	962		158	

Table 57

Average Percentage of Gain and Average Number of Objectives Mastered, Regular Term 1987-88

Missouri

Reading

Program	Number Tested	Average Number of Objectives Mastered	Average Percent of Gain
Elementary Basic Skills	645	9	60%
Career Development	84	8	60%
English as a Second Language	8	6	48%
Total	737		

Mathematics

Program	Number Tested	Average Number of Objectives Mastered	Average Percent of Gain
Elementary Basic Skills	601	8	65%
Career Development	84	10	63%
Total	685		

Oral Language

Program	Number Tested	Average Number of Objectives Mastered	Average Percent of Gain
Elementary Basic Skills	552	7	60%
Career Development	84	8	66%
English as a Second Language	8	10	54%
Total	644		

Table 58

Average Percentage of Gain and Average Number of Objectives Mastered, Summer Term 1988

Missouri

Reading

Program	Number Tested	Average Number of Objectives Mastered	Average Percent of Gain
Elementary Basic Skills (school-based)	150	4	52%
Total	150		

Mathematics

Program	Number Tested	Average Number of Objectives Mastered	Average Percent of Gain
Elementary Basic Skills (school-based)	150	4	60%
Total	150		

Oral Language

Program	Number Tested	Average Number of Objectives Mastered	Average Percent of Gain
Elementary Basic Skills (school-based)	150	4	48%
Total	150		

MONTANA

During the summer term, migrant education services were provided to 763 students in pre-kindergarten through grade 12. Participants received services in English to students of limited English background, reading, language arts, mathematics, vocational/career education, computer literacy, and health. Secondary students received tutorial services. Supporting services included health, dental, nutrition, and pupil transportation. There were no migrant education projects in the regular term.

Montana provided achievement information by school district. Test scores from point-in-time testing for reading and mathematics were reported. The reading instructional component used was Reading Basics Plus. Students tested in mathematics used the Individualized Mathematics Program (IMP). According to the SEA, the data provided are raw scores and do not represent standard scores or NCEs, and the testing differed greatly from site to site in administration, content, length, and reporting methods. For the purpose of this report, the project level data were aggregated weighting the mean scores by the number of participants tested at each test level.

A total of 221 participants were tested in reading and 335 were tested in mathematics. In reading, the weighted mean gain scores ranged from 12.0 for students tested for readiness to 3.5 for participants tested on level 6. Mathematics mean gain scores ranged from 8.0 for participants tested on level 2 to 3.3 for participants tested in kindergarten. (Table 59)

Table 59

Chapter 1 Migrant Education Achievement Results
for Students Tested in the Summer Term,
by Subject Area, 1987-88

Montana

Reading

Test Level[a/]	Number Tested	Weighted Mean Raw Scores		
		Pretest	Posttest	Gain
Pre-Primary	17	18.4	25.6	7.2
Primary	8	14.6	18.4	3.8
Readiness	48	42.0	54.0	12.0
1	20	12.8	16.6	3.8
2	44	29.4	35.3	5.9
3	20	25.4	30.3	4.9
4	29	23.9	27.9	4.0
5	27	25.2	29.0	3.8
6	8	24.5	28.0	3.5
Total	221			

Mathematics

Test Level[a/]	Number Tested	Weighted Mean Raw Scores		
		Pretest	Posttest	Gain
Kindergarten	57	12.1	15.4	3.3
1-3	89	32.5	38.4	5.9
4-6	39	41.9	47.5	5.6
1	48	19.7	25.3	5.6
2	102	27.9	35.9	8.0
Total	335			

a/ The test level categories were assigned by the testing company.

NEBRASKA

Nebraska's migrant education projects provided services to 714 summer term students in pre-kindergarten through grade 12. Participants received instructional services in English to students of limited English background, reading, language arts, mathematics, and vocational/career education. Supporting services included attendance, social work, and guidance; health; dental; nutrition; and pupil transportation. There were no migrant education projects in the regular term.

Because of the short four-week duration of the summer migrant projects, students were evaluated through the progress of individual students on objectives they studied in the Prescription Learning Computer Lab. The number of participants tested was not provided.

At one project, the staff administered pretests and posttests to a random sample of students to estimate achievement gains. In reading, the students in the random sample, on average, mastered 4.9 objectives during the four-week summer program. In the area of mathematics, students in the random sample mastered 5.3 objectives.

The other two project sites reported the number of objectives studied for all students. At one of these sites, students, on average, studied 2.4 reading objectives, 1.9 oral language objectives, and 3.1 mathematics objectives during the summer session. The early childhood students, on average, studied 3.3 objectives.

At the second of these sites, students, on average, studied 3 reading objectives, 3 oral language objectives, and 5.7 mathematics objectives. The early childhood students, on average, studied 2.8 objectives.

NEVADA

During the regular term, Nevada's migrant education projects provided services to 513 students in kindergarten through grade 12. Instructional services were provided in English to students of limited English background, reading, language arts, mathematics, and vocational/career education. Tutorial services were also provided. Supporting services were not provided. Nevada's summer term program served 28 students in kindergarten through grade 6 and grade 8. Instructional services were provided in English to students of limited English background, reading, and language arts. Supporting services were not provided.

Nevada provided pre- and post-test achievement data for reading, mathematics, and language arts for the regular term. Data were reported in NCEs for the fall-to-spring and annual testing cycles, using norm-referenced testing. However, for language arts testing was only done on an annual cycle. A number of tests were used. Three of these were the Stanford Achievement Test (SAT), the Iowa Test of Basic Skills (ITBS), and the California Achievement Test (CAT).

Table 60 provides pretest, posttest, and gain NCEs as well as the number tested, by subject area and grade, for the annual testing cycle. NCE gains for reading ranged from 8.8 (grade 8) to -6.9 (grade 6). For participants tested in mathematics, gains ranged from 15.3 NCEs (grade 6) to 0.9 NCEs (grade 5). Gains for language arts ranged from 4.8 NCEs (grade 3) to -6.6 NCEs (grade 2).

Table 61 provides pretest, posttest, and gain NCEs as well as the number tested, by subject area and grade, for the fall-to-spring testing cycle. NCE gains for reading ranged from 14.5 (grade 9) to -22.3 (grade 3). For participants tested in mathematics, gains ranged from 15.0 NCEs (grade 8) to -5.2 NCEs (grade 10).

Nevada did not provide achievement information for the summer term.

Table 60

Chapter 1 Migrant Education Achievement Results
for Students Tested on an Annual Schedule,
by Subject Area, 1987-88

Nevada

Reading

Grade	Number Tested	NCE		
		Pretest	Posttest	Gain
K	--	--	--	--
1	--	--	--	--
2	3	47.4	42.1	-5.3
3	21	38.6	39.7	1.1
4	22	39.0	41.0	2.0
5	15	34.1	29.6	-4.5
6	6	37.1	30.2	-6.9
7	9	27.2	28.3	1.1
8	8	23.0	31.8	8.8
9	--	--	--	--
10	--	--	--	--
11	--	--	--	--
12	--	--	--	--
Total	84			

Mathematics

Grade	Number Tested	NCE		
		Pretest	Posttest	Gain
K	--	--	--	--
1	--	--	--	--
2	18	31.3	33.6	2.3
3	12	45.3	54.4	9.1
4	13	40.6	48.3	7.7
5	10	41.0	41.9	0.9
6	10	29.2	44.5	15.3
7	9	29.9	32.9	3.0
8	8	31.6	42.2	10.6
9	--	--	--	--
10	--	--	--	--
11	--	--	--	--
12	--	--	--	--
Total	80			

Table 60 (continued)

Language Arts

Grade	Number Tested	NCE		
		Pretest	Posttest	Gain
K	--	--	--	--
1	--	--	--	--
2	14	33.8	27.2	-6.6
3	13	33.7	38.5	4.8
4	18	35.0	38.9	3.9
5	18	32.1	32.0	-0.1
6	6	34.3	29.7	-4.6
7	8	27.5	31.4	3.9
8	11	27.5	30.2	2.7
9	--	--	--	--
10	--	--	--	--
11	--	--	--	--
12	--	--	--	--
Total	88			

Table 61

Chapter 1 Migrant Education Achievement Results
for Students Tested on a Fall-Spring Schedule,
by Subject Area, 1987-88

Nevada

Reading

Grade	Number Tested	NCE		
		Pretest	Posttest	Gain
K	--	--	--	--
1	--	--	--	--
2	4	44.5	44.7	0.2
3	3	66.3	44.0	-22.3
4	1	13.1	15.4	2.3
5	3	46.1	42.6	-3.5
6	6	39.8	53.1	13.3
7	6	40.8	42.3	1.5
8	3	40.2	43.7	3.5
9	9	26.8	41.3	14.5
10	4	63.7	62.9	-0.8
11	3	40.8	43.8	3.0
12	1	23.0	13.1	-9.9
Total	43			

Mathematics

Grade	Number Tested	NCE		
		Pretest	Posttest	Gain
K	--	--	--	--
1	--	--	--	--
2	3	12.0	26.1	14.1
3	--	--	--	--
4	--	--	--	--
5	2	38.0	48.7	10.7
6	3	24.7	34.0	9.3
7	4	33.9	43.4	9.5
8	2	24.1	39.1	15.0
9	1	39.6	46.3	6.7
10	4	69.2	64.0	-5.2
11	1	65.6	73.7	8.1
12	1	30.0	31.5	1.5
Total	21			

NEW HAMPSHIRE

Migrant education projects in this state provided services to 118 regular term students in pre-kindergarten through grade 12. Participants received instructional services in reading, language arts, mathematics, and vocational/career education. Secondary tutorial and GED/HEP services were also provided. Supporting services included attendance, social work, and guidance; nutrition; and pupil transportation. The summer term projects served 82 participants in pre-kindergarten through 11th grade. Instructional services included reading, language arts, mathematics, and vocational/career education. Preschool participants also received instruction. Supporting services included attendance, social work, and guidance; nutrition; and pupil transportation.

Achievement data were not provided for the regular term or the summer term. However, testing using the California Achievement Test was initiated in the fall of 1987.

NEW JERSEY

The migrant education projects in New Jersey served 1,461 regular term students in pre-kindergarten through grade 12. During the regular term, instructional services were provided in English to students of limited English background, reading, language arts, mathematics, vocational/career education, and health education/safety. Preschool, gifted, and handicapped students also received instruction. Also, tutorial services were provided for secondary students. There were also special activities. Supporting services included attendance, social work, and guidance; health; dental; nutrition; pupil transportation; and eye health services. Summer term projects served 767 students in pre-kindergarten through grade 12. In the summer term, participants were provided instructional services in English to students of limited English background, reading, language arts, mathematics, vocational/career education, and health education/safety. Other instructional services included preschool activities, special education, tutorial services for elementary students, computer literacy, and multi-cultural education. Supporting services provided during the regular term were also provided during the summer term.

New Jersey provided pre- and post-test achievement data for reading, writing, and mathematics for the regular term. Data were reported in NCEs for the fall-to-spring and annual testing cycles. Norm-referenced testing was administered using a variety of tests.

Table 62 provides pretest, posttest, and gain NCEs as well as the number tested, by subject area and grade, for participants tested on an annual test cycle. For participants tested in reading, gains ranged from 8.0 NCEs (grade 4) to 0.9 NCEs (grade 2). For mathematics, the NCE gains ranged from 10.7 (grade 12) to 1.0 (grade 3). For writing, the NCE gains ranged from 39.0 (grade 9) to -24.0 (grade 11).

Table 63 provides pretest, posttest, and gain NCEs as well as the number tested, by subject area and grade, for participants tested on a fall-to-spring test cycle. For participants tested in reading, gains ranged from 15.4 NCEs (grade 11) to -1.9 NCEs (grade 5). For mathematics, NCE gains ranged from 22.0 (grade 12) to 3.6 (grade 7). For writing, NCE gains ranged from 15.8 NCEs (grade 9) to -3.0 NCEs (grade 11).

During the summer term there was a program evaluation. Skills mastery tests were given, but were not aggregated statewide.

Table 62

Chapter 1 Migrant Education Achievement Results
for Students Tested on an Annual Schedule,
by Subject Area, 1987-88

New Jersey

Reading

Grade	Number Tested	NCE		
		Pretest	Posttest	Gain
K	--	--	--	--
1	--	--	--	--
2	23	47.8	48.7	0.9
3	41	42.7	47.9	5.2
4	43	39.5	47.5	8.0
5	36	41.1	46.1	5.0
6	24	45.4	51.0	5.6
7	31	41.1	47.9	6.8
8	20	43.4	49.9	6.5
9	12	34.4	38.8	4.4
10	8	40.9	48.0	7.1
11	4	56.4	57.4	1.0
12	5	38.2	40.2	2.0
Total	247			

Mathematics

Grade	Number Tested	NCE		
		Pretest	Posttest	Gain
K	--	--	--	--
1	--	--	--	--
2	23	55.6	57.0	1.4
3	42	53.2	54.2	1.0
4	33	50.3	53.3	3.0
5	35	46.8	54.1	7.3
6	22	44.1	51.3	7.2
7	26	51.2	54.6	3.4
8	14	56.4	58.2	1.8
9	12	40.3	50.1	9.8
10	6	45.2	51.9	6.7
11	4	52.2	60.7	8.5
12	5	39.1	49.8	10.7
Total	222			

Table 62 (continued)

Writing

Grade	Number Tested	NCE		
		Pretest	Posttest	Gain
K	--	--	--	--
1	--	--	--	--
2	12	38.4	51.8	13.4
3	23	45.2	50.0	4.8
4	18	38.1	43.6	5.5
5	18	42.9	47.6	4.7
6	15	45.7	53.7	8.0
7	12	40.8	47.1	6.3
8	8	49.7	52.2	2.5
9	2	54.0	93.0	39.0
10	2	31.5	37.5	6.0
11	1	68.0	44.0	-24.0
12	--	--	--	--
Total	111			

Table 63

Chapter 1 Migrant Education Achievement Results for Students Tested on a Fall-Spring Schedule, by Subject Area, 1987-88

New Jersey

Reading

Grade	Number Tested	NCE		
		Pretest	Posttest	Gain
K	--	--	--	--
1	--	--	--	--
2	29	30.4	32.2	1.8
3	29	35.2	36.5	1.3
4	30	31.2	42.4	11.2
5	24	42.3	40.4	-1.9
6	29	37.3	43.5	6.2
7	17	31.1	34.8	3.7
8	25	24.9	28.8	3.9
9	7	24.6	36.1	11.5
10	10	26.8	29.8	3.0
11	3	11.7	27.1	15.4
12	1	24.0	39.0	15.0
Total	204			

Mathematics

Grade	Number Tested	NCE		
		Pretest	Posttest	Gain
K	--	--	--	--
1	--	--	--	--
2	27	37.0	47.5	10.5
3	31	36.6	56.6	20.0
4	28	37.7	52.2	14.5
5	24	42.9	51.9	9.0
6	27	39.5	51.1	11.6
7	16	40.0	43.6	3.6
8	20	40.1	48.7	8.6
9	4	35.0	43.8	8.8
10	12	35.2	40.5	5.3
11	5	19.0	29.4	10.4
12	1	24.0	46.0	22.0
Total	195			

Table 63 (continued)

Writing

Grade	Number Tested	NCE		
		Pretest	Posttest	Gain
K	--	--	--	--
1	--	--	--	--
2	18	30.0	32.9	2.9
3	27	36.4	44.3	7.9
4	28	36.7	41.9	5.2
5	22	39.1	47.8	8.7
6	28	34.9	43.6	8.7
7	14	31.5	41.5	10.0
8	19	31.2	37.5	6.3
9	3	30.0	45.8	15.8
10	7	27.6	40.0	12.4
11	2	44.5	41.5	-3.0
12	1	24.0	35.0	11.0
Total	169			

NEW MEXICO

New Mexico's migrant education projects provided services to 1,219 regular term students in pre-kindergarten through grade 12. Instructional services were provided in English to students of limited English background, reading, language arts, and mathematics. Supporting services included attendance, social work, and guidance; health; dental; nutrition; pupil transportation; clothing; enrollment/scheduling for secondary students; vision/hearing screening; and field trips. Summer term services were provided to 599 pre-kindergarten through tenth graders. Participants in the summer term received the same instructional services as those received by participants in the regular term. They also received art enrichment. Supporting services included attendance, social work, and guidance; health; dental; nutrition; pupil transportation; field trips; and nutrition education.

Using norm-referenced tests, New Mexico provided pre-and post-test achievement data for reading, mathematics, and language arts for the regular term. Reading, mathematics, and language arts data were reported in NCEs for the annual testing cycle, while mathematics and language arts data were also submitted for the fall-to-spring cycle. The most commonly used test was the Comprehensive Test of Basic Skills (CTBS).

Table 64 provides pretest, posttest, and gain NCEs as well as the number tested, by subject area and grade, for participants tested on an annual test cycle. For participants tested in reading, gains ranged from 12.1 NCEs (grade 3) to -0.7 NCEs (grade 2). For mathematics, NCE gains ranged from 11.4 (grade 4) to -2.0 (grade 10). For language arts, NCE gains ranged from 20.7 (grade 1) to -2.6 (grade 11).

Table 65 provides pretest, posttest, and gain NCEs as well as the number tested, by subject area and grade, for participants tested on a fall-to-spring test cycle. For participants tested in mathematics, gains ranged from 14.4 NCEs (grade 5) to -2.6 NCEs (grade 6). For language arts, NCE gains ranged from 16.0 (grade 12) to -0.5 (grade 9). No projects were tested in reading on a fall-to-spring cycle.

There was no statewide testing during the summer. However, there was school-level and locally-developed testing.

Table 64

Chapter 1 Migrant Education Achievement Results
for Students Tested on an Annual Schedule,
by Subject Area, 1987-88

New Mexico

Reading

Grade	Number Tested	NCE		
		Pretest	Posttest	Gain
K	--	--	--	--
1	--	--	--	--
2	6	27.4	26.7	-0.7
3	8	16.0	28.1	12.1
4	13	21.9	31.8	9.9
5	6	33.3	34.5	1.2
6	5	36.0	36.8	0.8
7	3	23.0	33.3	10.3
8	--	--	--	--
9	4	42.7	44.5	1.8
10	2	35.5	43.5	8.0
11	4	37.2	39.0	1.8
12	--	--	--	--
Total	51			

Mathematics

Grade	Number Tested	NCE		
		Pretest	Posttest	Gain
K	--	--	--	--
1	5	34.6	35.0	0.4
2	11	34.4	41.4	7.0
3	21	35.4	35.8	0.4
4	21	33.1	44.5	11.4
5	17	33.6	34.8	1.2
6	13	28.9	30.2	1.3
7	6	28.5	29.7	1.2
8	7	29.2	35.9	6.7
9	12	36.5	39.8	3.3
10	1	32.0	30.0	-2.0
11	--	--	--	--
12	--	--	--	--
Total	114			

Table 64 (continued)

Language Arts

Grade	Number Tested	NCE		
		Pretest	Posttest	Gain
K	--	--	--	--
1	26	17.5	38.2	20.7
2	27	31.0	38.1	7.1
3	36	26.6	35.4	8.8
4	35	28.3	39.7	11.4
5	25	32.1	39.2	7.1
6	20	31.5	42.5	11.0
7	31	27.7	31.3	3.6
8	13	32.5	42.7	10.2
9	31	28.5	28.4	-0.1
10	14	24.0	24.6	0.6
11	9	25.5	22.9	-2.6
12	3	24.4	29.7	5.3
Total	270			

Table 65

Chapter 1 Migrant Education Achievement Results
for Students Tested on a Fall-Spring Schedule,
by Subject Area, 1987-88

New Mexico

Mathematics

Grade	Number Tested	NCE		
		Pretest	Posttest	Gain
K	--	--	--	--
1	--	--	--	--
2	14	32.9	33.3	0.4
3	5	39.6	44.2	4.6
4	11	33.0	46.2	13.2
5	9	27.9	42.3	14.4
6	9	32.7	30.1	-2.6
7	4	43.2	49.0	5.8
8	4	32.0	45.5	13.5
9	6	37.8	35.8	-2.0
10	6	37.4	41.2	3.8
11	2	29.5	32.5	3.0
12	1	46.0	47.0	1.0
Total	71			

Language Arts

Grade	Number Tested	NCE		
		Pretest	Posttest	Gain
K	10	21.8	36.6	14.8
1	37	23.1	35.0	11.9
2	39	25.6	34.7	9.1
3	25	31.8	37.0	5.2
4	38	28.8	36.1	7.3
5	46	24.4	30.0	5.6
6	28	25.6	29.2	3.6
7	23	16.3	23.1	6.8
8	17	22.2	29.9	7.7
9	17	26.9	26.4	-0.5
10	11	27.0	27.8	0.8
11	9	25.1	29.3	4.2
12	1	7.0	23.0	16.0
Total	301			

NEW YORK

In New York, migrant education services were provided to 4,892 regular term students and 3,287 summer term students in pre-kindergarten through grade 12. Participants in both terms received services in English to students of limited English background, reading, language arts, mathematics, vocational/career education, physical education, writing, and social studies. Also, during both terms parent education and adolescent education was provided. In addition, summer term participants received music, art, and health. For both terms, supporting services included attendance, social work, and guidance; health; dental; nutrition; and pupil transportation. During both terms there were field trips.

Norm-referenced tests were administered, in large part to formerly migrant students, on a fall-to-spring test cycle. However, since migrant pupils were not always present for both test administrations, migrant projects were encouraged to use other measures for assessing pupil achievement. The norm-referenced data were not provided because the SEA indicated that the criterion-referenced data more accurately reflected the impact of the program.

Where appropriate, mastery level criterion-referenced tests were administered, and the resultant data, including instructional time, were reported by subject area and grade level for the regular term.

Criterion-referenced testing in New York provided information on participants' achievement by allowing for the examination of the mastery of objectives by the amount of instructional time. Based on previous experience, it was expected that participants would master one instructional objective for each six hours of instruction. New York reported, for the regular term, the number of participants, mean number of contact hours, mean number of objectives mastered, mean number of contact hours per objective, and mean number of objectives per hour.

Tables 66 and 67 show this information, by skill area (readiness, reading, and mathematics) and grade, for non-limited English proficient participants tested on an annual and a fall-to-spring test cycle, respectively. Tables 68 and 69 present this information, by skill area (readiness, reading, mathematics, English as a second language, and reading in native language) and grade, for limited English proficient participants tested on an annual and a fall-to-spring test cycle, respectively. Participants were not tested in reading in native language on a fall-to-spring test cycle.

According to the information reported, participants demonstrated progress in mastering skills in all subject areas where services were provided. In almost all cases, as the amount of time increased, the number of objectives mastered also increased.

Both non-limited English proficient and limited English proficient participants demonstrated gains. However, in almost all cases, the amount of time needed for mastery was greater for the limited English proficient participants.

Criterion-referenced testing was administered during the summer. However, the information was not provided in the State Performance Report.

Table 66

Number of Objectives Mastered for Non-Limited English Proficient Students Tested on an Annual Schedule, by Subject Area, 1986-87

New York

Readiness

Grade	Number Tested	Mean Number of Contact Hours	Mean Number Objectives Mastered	Mean Number Contact Hours Per Objective	Mean Number Objectives Per Hour
K	--	--	--	--	--
1	25	23	6.7	3.43	0.29
2	7	13	2.3	5.65	0.18
4	1	4	0.0	0.00	0.00
7	1	5	4.0	1.25	0.80
UG*	9	18	6.3	2.85	0.35
Total	43				

Reading

Grade	Number Tested	Mean Number of Contact Hours	Mean Number Objectives Mastered	Mean Number Contact Hours Per Objective	Mean Number Objectives Per Hour
K	36	31	6.2	5.00	0.20
1	57	29	5.9	4.91	0.20
2	45	22	4.2	5.23	0.19
3	35	30	4.6	6.52	0.15
4	28	22	5.2	4.23	0.24
5	29	27	3.2	8.43	0.12
6	26	27	3.2	8.43	0.12
7	12	20	6.4	3.12	0.32
8	11	13	1.5	8.66	0.12
9	10	17	4.2	4.04	0.25
10	5	7	3.4	2.05	0.49
11	2	23	6.0	3.83	0.26
12	3	17	0.0	0.00	0.00
UG*	38	47	4.4	10.68	0.09
Total	337				

* Ungraded

Table 66 (continued)

Mathematics

Grade	Number Tested	Mean Number of Contact Hours	Mean Number Objectives Mastered	Mean Number Contact Hours Per Objective	Mean Number Objectives Per Hour
K	30	9	2.7	3.33	0.30
1	36	11	1.3	8.46	0.12
2	35	9	1.2	7.50	0.13
3	27	13	2.4	5.41	0.18
4	22	11	4.3	2.55	0.39
5	3	25	3.3	7.57	0.13
6	21	15	3.1	4.83	0.21
7	10	11	1.4	7.85	0.13
8	5	6	3.2	1.87	0.53
9	8	5	2.3	2.17	0.46
10	4	4	1.5	2.66	0.38
11	2	9	5.0	1.80	0.56
UG*	36	18	2.0	9.00	0.11
Total	239				

* Ungraded

Table 67

Number of Objectives Mastered for Non-Limited English Proficient Students Tested on a Fall-Spring Schedule, by Subject Area, 1986-87

New York

Readiness

Grade	Number Tested	Mean Number of Contact Hours	Mean Number Objectives Mastered	Mean Number Contact Hours Per Objective	Mean Number Objectives Per Hour
K	--	--	--	--	--
1	9	8	4.7	1.70	0.59
2	3	4	1.0	4.00	0.25
3	2	4	2.5	1.60	0.63
UG*	2	26	17.0	1.53	0.65
Total	16				

Reading

Grade	Number Tested	Mean Number of Contact Hours	Mean Number Objectives Mastered	Mean Number Contact Hours Per Objective	Mean Number Objectives Per Hour
K	45	14	11.7	1.19	0.84
1	57	14	6.9	2.02	0.49
2	39	21	6.2	3.38	0.30
3	38	18	5.3	3.39	0.29
4	34	19	4.5	4.22	0.24
5	18	14	5.5	2.54	0.39
6	24	10	3.3	3.03	0.33
7	17	18	2.8	6.42	0.16
8	23	9	1.8	5.00	0.20
9	7	11	2.4	4.58	0.22
10	5	17	0.0	0.00	0.00
11	2	16	0.0	0.00	0.00
12	--	--	--	--	--
UG*	9	16	5.7	2.80	0.36
Total	318				

* Ungraded

Table 67 (continued)

Mathematics

Grade	Number Tested	Mean Number of Contact Hours	Mean Number Objectives Mastered	Mean Number Contact Hours Per Objective	Mean Number Objectives Per Hour
K	28	5	3.3	8.48	0.66
1	38	5	1.7	2.94	0.34
2	29	9	1.8	5.00	0.16
3	22	8	3.8	2.10	0.48
4	25	8	4.4	1.81	0.55
5	12	5	2.5	2.00	0.50
6	24	5	2.3	2.17	0.46
7	12	6	2.3	2.60	0.38
8	20	5	1.2	4.16	0.24
9	3	3	1.0	3.00	0.33
10	4	6	9.3	0.64	1.55
11	--	--	--	--	--
12	1	4	0.0	0.00	0.00
UG*	4	7	4.5	1.55	0.64
Total	222				

* Ungraded

Table 68

Number of Objectives Mastered for Limited English Proficient Students Tested on an Annual Schedule, by Subject Area, 1987-88

New York

Readiness

Grade	Number Tested	Mean Number of Contact Hours	Mean Number Objectives Mastered	Mean Number Contact Hours Per Objective	Mean Number Objectives Per Hour
K	3	74	31.7	2.33	0.43
1	2	26	15.5	1.67	0.60
2	1	15	4.0	3.75	0.27
Total	6				

Reading

Grade	Number Tested	Mean Number of Contact Hours	Mean Number Objectives Mastered	Mean Number Contact Hours Per Objective	Mean Number Objectives Per Hour
K	24	67	32.5	2.06	0.49
1	26	73	26.5	2.75	0.36
2	30	53	2.8	18.92	0.05
3	18	72	3.8	18.94	0.05
4	1	38	4.0	9.50	0.11
5	21	71	3.0	23.66	0.04
6	22	57	3.5	16.28	0.06
7	15	48	4.1	11.70	0.09
8	12	103	3.8	27.10	0.04
9	17	46	1.4	32.85	0.03
10	5	49	4.2	11.66	0.09
11	3	7	2.0	3.50	0.29
12	--	--	--	--	--
UG*	3	62	0.7	88.57	0.01
Total	197				

* Ungraded

Table 68 (continued)

Mathematics

Grade	Number Tested	Mean Number of Contact Hours	Mean Number Objectives Mastered	Mean Number Contact Hours Per Objective	Mean Number Objectives Per Hour
K	26	32	6.4	5.00	0.20
1	23	32	3.9	8.20	0.12
2	24	15	1.7	8.82	0.11
3	22	18	1.2	15.00	0.07
4	14	22	2.9	7.58	0.13
5	18	20	2.8	7.14	0.14
6	20	15	2.7	5.55	0.18
7	7	25	3.3	7.57	0.13
8	4	36	4.3	8.37	0.12
9	8	6	2.3	2.60	0.38
10	2	23	4.5	5.11	0.20
11	1	14	8.0	1.75	0.57
UG*	3	18	2.3	7.82	0.13
Total	172				

English as a Second Language

Grade	Number Tested	Mean Number of Contact Hours	Mean Number Objectives Mastered	Mean Number Contact Hours Per Objective	Mean Number Objectives Per Hour
K	21	22	24.2	0.90	1.10
1	18	31	26.7	1.16	0.86
2	16	21	1.6	12.12	0.08
3	16	32	3.1	10.32	0.10
4	15	18	2.5	7.20	0.14
5	12	17	2.1	8.09	0.12
6	11	23	2.2	10.45	0.10
7	4	14	6.5	2.15	0.46
8	1	3	2.0	1.50	0.67
9	1	35	2.0	17.50	0.06
10	1	4	1.0	4.00	0.25
UG*	1	17	0.0	0.00	0.00
Total	117				

* Ungraded

Table 68 (continued)

Reading in Native Language

Grade	Number Tested	Mean Number of Contact Hours	Mean Number Objectives Mastered	Mean Number Contact Hours Per Objective	Mean Number Objectives Per Hour
K	15	25	1.3	19.23	0.05
1	22	16	3.5	4.57	0.22
2	19	28	2.6	10.76	0.09
3	15	16	2.3	6.95	0.14
4	13	20	0.8	25.00	0.04
5	16	9	0.8	11.25	0.09
6	13	13	1.1	11.81	0.08
7	6	13	2.3	5.65	0.18
8	3	11	1.3	8.46	0.12
9	--	--	--	--	--
10	--	--	--	--	--
11	1	4	2.0	2.00	0.50
12	1	2	0.0	0.00	0.00
UG*	2	19	1.5	12.66	0.08
Total	126				

* Ungraded

Table 69

Number of Objectives Mastered for Limited English Proficient Students Tested on a Fall-Spring Schedule, by Subject Area, 1987-88

New York

Readiness

Grade	Number Tested	Mean Number of Contact Hours	Mean Number Objectives Mastered	Mean Number Contact Hours Per Objective	Mean Number Objectives Per Hour
K	3	10	2.7	3.70	0.27
Total	3				

Reading

Grade	Number Tested	Mean Number of Contact Hours	Mean Number Objectives Mastered	Mean Number Contact Hours Per Objective	Mean Number Objectives Per Hour
K	5	20	40.8	0.49	2.04
1	3	28	21.3	1.31	0.76
2	3	21	20.7	1.01	0.99
3	1	36	2.0	18.00	0.06
4	1	3	159.0	0.01	53.00
5	3	18	4.7	3.82	0.26
6	1	2	7.0	0.28	3.50
7	1	105	2.0	52.50	0.02
8	--	--	--	--	--
9	--	--	--	--	--
10	--	--	--	--	--
11	--	--	--	--	--
12	1	27	5.0	5.40	0.19
UG*	--	--	--	--	--
Total	19				

* Ungraded

Table 69 (continued)

Mathematics

Grade	Number Tested	Mean Number of Contact Hours	Mean Number Objectives Mastered	Mean Number Contact Hours Per Objective	Mean Number Objectives Per Hour
K	--	--	--	--	--
1	--	--	--	--	--
2	2	17	2.5	6.80	0.15
3	1	22	3.0	7.33	0.14
4	1	3	12.0	0.25	4.00
5	3	19	5.0	3.80	0.26
6	--	--	--	--	--
7	1	44	1.0	44.00	0.02
8	1	20	1.0	20.00	0.05
9	--	--	--	--	--
10	--	--	--	--	--
11	--	--	--	--	--
12	1	8	4.0	2.00	0.50
UG*	--	--	--	--	--
Total	10				

English as a Second Language

Grade	Number Tested	Mean Number of Contact Hours	Mean Number Objectives Mastered	Mean Number Contact Hours Per Objective	Mean Number Objectives Per Hour
K	1	21	8.0	2.62	1.38
1	1	2	21.0	0.09	1.50
2	1	80	16.0	5.00	0.20
3	1	109	7.0	15.57	0.06
4	1	4	4.0	1.00	1.00
5	1	72	7.0	10.28	0.10
6	1	111	5.0	22.20	0.05
7	--	--	--	--	--
8	1	120	10.0	12.00	0.08
9	2	54	17.5	3.08	0.32
10	--	--	--	--	--
11	--	--	--	--	--
12	--	--	--	--	--
UG*	--	--	--	--	--
Total	10				

* Ungraded

NORTH CAROLINA

North Carolina's migrant education projects provided services to 3,818 regular term students and 2,254 summer term students in pre-kindergarten through grade 12. Instructional services were provided in English to students of limited English background, reading, language arts, mathematics, vocational/career education, social studies, literacy, science, and motor skills. Supporting services included attendance, social work, and guidance; health; dental; nutrition; and pupil transportation. Field trips were also provided for summer term participants.

An assessment of achievement status of migrant participants in the regular term was obtained by an analysis of test results from the annual statewide testing program. This assessment was provided by norm-referenced testing. Students in grades 3, 6, and 8 were tested annually, usually in April, in the areas of reading, mathematics, and language. The instrument used was the California Achievement Test (CAT). During 1986, the state switched from CAT Form C to CAT Form E.

Table 70 provides a scale score, percentile rank, and a NCE score, by subject area and grade for the 755 participants assessed. Percentile scores were the highest in grade 3 for mathematics and language.

No statewide achievement information was provided for the summer term.

Table 70

Achievement Results for Migrant Participants from State Assessment Program, by Subject Area, 1987-88

North Carolina

Reading

Grade	Number Tested	Scale Score	Percentile	NCE
3	261	647	35	42
6	234	710	30	39
8	260	741	30	39
Total	755			

Language

Grade	Number Tested	Scale Score	Percentile	NCE
3	261	665	41	47
6	234	692	33	42
8	260	710	35	43
Total	755			

Mathematics

Grade	Number Tested	Scale Score	Percentile	NCE
3	261	676	48	50
6	234	729	38	44
8	260	760	36	43
Total	755			

NORTH DAKOTA

During the regular term, the migrant education projects served 134 students in pre-kindergarten through grade 6 (excluding 2nd grade and 4th grade). Participants received instructional services in reading, language arts, and mathematics. Supporting services consisted of pupil transportation. The summer term migrant projects served 1,445 students in pre-kindergarten through grade 12. Participants in the summer term received the same instructional services as those provided in the regular term. Supporting services included attendance, social work, and guidance; health; dental; nutrition; and pupil transportation.

Pre- and post-test results for reading during the state's summer projects were gathered and averaged for the participating sites.

Table 71 provides NCE gain scores, by grade. For reading, the NCEs ranged from 8.7 (grade 4) to 1.8 (grade 6).

Regular term participants were tested under the regular Chapter 1 Basic Grants Program.

Table 71

Average NCE Scores for Migrant Participants,
by Subject Area, Summer 1988

North Dakota

Reading

Grade	NCE Gain Score
2	3.0
3	8.6
4	8.7
5	3.0
6	1.8

OHIO

Migrant education projects in Ohio served 1,277 regular term students and 1,780 summer term students in pre-kindergarten through grade 12. For both terms, instructional services were provided in English to students of limited English background, reading, language arts, mathematics, social studies, science, health, and other junior high classes (not specified). Vocational/career education was also provided during the regular term. Regular term supporting services included attendance, social work, and guidance; health; nutrition; and pupil transportation. Summer supporting services included the same services found in the regular term plus dental.

The Ohio migrant education program implemented standardized achievement testing at elementary grade levels in 1987 for the summer term. The testing is part of a point-in-time assessment including students in the following grades:

Summer 1987 Grades 2, 3, 4
Summer 1988 Grades 3, 4, 5
Summer 1989 Grades 4, 5, 6

The test given to all students is the Stanford Achievement Test.

Currently, test scores have been collected and analyzed from the summers of 1987 and 1988. Table 72 provides the results.

Reading scores are consistently lower than mathematics scores. SEA officials explained that this result is to be expected since many of the students are not native speakers of English, yet the standardized tests are written in English.

Regular term achievement data were not provided.

Table 72

Ohio Migrant Education Program
Summer Testing Program Normal Curve Equivalent (NCE) Scores
and Number Tested

Ohio

Reading and Mathematics - NCE Scores

		Grade 2	Grade 3	Grade 4	Grade 5
1987	Reading	35.8	23.8	37.1	--
	Mathematics	40.8	42.8	47.0	--
1988	Reading	--	30.9	38.4	34.1
	Mathematics	--	42.9	49.2	47.2

Reading and Mathematics - Number Tested

	Grade 2	Grade 3	Grade 4	Grade 5
1987	88	84	71	--
1988	--	60	71	65

OKLAHOMA

The migrant education projects in the regular term in this state served 1,582 students in pre-kindergarten through grade 12. Participants received instructional services in English to students of limited English background, reading, language arts, mathematics, vocational/career education, and cultural awareness. Supporting services included attendance, social work, and guidance; health; dental; and nutrition. There were no summer term projects.

Oklahoma provided pre- and post-test achievement data for reading, mathematics, and language arts. Data were reported in NCEs for the fall-to-spring and annual test cycles. Most districts used the Metropolitan Achievement Test (MAT). Some districts used the MAT and the California Achievement Test (CAT).

Table 73 provides pretest, posttest, and gain NCEs as well as the number tested, by subject area and grade, for participants tested on an annual test cycle. For reading, NCE gains ranged from 15.4 (kindergarten) to -3.5 (grade 5). For mathematics, the gains ranged from 23.8 NCEs (kindergarten) to -2.8 NCEs (grade 4). For language arts, NCE gains ranged from 17.1 (kindergarten) to -8.1 (grade 11).

Table 74 provides pretest, posttest, and gain NCEs as well as the number tested, by subject area and grade, for participants tested on a fall-to-spring test cycle. For reading, NCE gains ranged from 17.9 (grade 7) to -4.6 (kindergarten). For mathematics, the gains ranged from 16.3 NCEs (grade 9) to -6.7 NCEs (grade 10). For language arts, NCE gains ranged from 11.1 (kindergarten) to -2.0 (grade 2).

Table 73

Chapter 1 Migrant Education Achievement Results for Students Tested on an Annual Schedule, by Subject Area, 1987-88

Oklahoma

Reading

Grade	Number Tested	NCE		
		Pretest	Posttest	Gain
K	4	21.1	36.5	15.4
1	33	44.4	49.7	5.3
2	44	44.4	47.5	3.1
3	41	44.1	41.8	-2.3
4	44	41.4	46.1	4.7
5	40	44.1	40.6	-3.5
6	36	36.9	41.0	4.1
7	26	34.7	37.4	2.7
8	33	44.5	45.1	0.6
9	17	46.9	55.1	8.2
10	11	28.9	32.1	3.2
11	14	38.3	36.7	-1.6
12	9	45.2	45.6	0.4
Total	352			

Mathematics

Grade	Number Tested	NCE		
		Pretest	Posttest	Gain
K	2	16.2	40.0	23.8
1	44	43.7	45.9	2.2
2	52	47.1	48.1	1.0
3	69	43.3	45.4	2.1
4	70	47.1	44.3	-2.8
5	71	38.1	42.1	4.0
6	44	36.8	41.8	5.0
7	28	39.4	41.5	2.1
8	31	47.4	44.8	-2.6
9	13	57.3	61.7	4.4
10	11	40.3	43.9	3.6
11	17	42.4	42.2	-0.2
12	9	44.1	43.9	-0.2
Total	461			

Table 73 (continued)

Language Arts

Grade	Number Tested	NCE		
		Pretest	Posttest	Gain
K	3	16.7	33.8	17.1
1	34	39.6	42.8	3.2
2	34	44.6	42.8	-1.8
3	61	38.0	42.2	4.2
4	44	43.3	44.9	1.6
5	49	39.1	39.7	0.6
6	35	38.5	44.9	6.4
7	18	34.3	37.1	2.8
8	36	40.7	41.5	0.8
9	15	44.8	45.8	1.0
10	15	35.6	35.4	-0.2
11	12	37.7	29.6	-8.1
12	10	40.7	38.5	-2.2
Total	366			

Table 74

Chapter 1 Migrant Education Achievement Results
for Students Tested on a Fall-Spring Schedule,
by Subject Area, 1987-88

Oklahoma

Reading

Grade	Number Tested	NCE		
		Pretest	Posttest	Gain
K	17	52.3	47.7	-4.6
1	31	37.3	45.3	8.0
2	19	39.9	45.1	5.2
3	14	32.2	38.7	6.5
4	8	41.8	49.4	7.6
5	12	34.0	37.6	3.6
6	14	34.5	38.6	4.1
7	5	32.6	50.5	17.9
8	--	--	--	--
9	1	33.0	48.4	15.4
10	--	--	--	--
11	--	--	--	--
12	--	--	--	--
Total	121			

Mathematics

Grade	Number Tested	NCE		
		Pretest	Posttest	Gain
K	23	37.1	43.6	6.5
1	33	36.0	47.0	11.0
2	27	38.7	48.3	9.6
3	21	32.0	43.8	11.8
4	19	40.7	43.3	2.6
5	16	31.3	37.3	6.0
6	22	32.1	40.4	8.3
7	5	50.9	63.4	12.5
8	6	38.1	46.3	8.2
9	5	35.7	52.0	16.3
10	3	38.7	32.0	-6.7
11	4	29.0	36.5	7.5
12	3	39.6	47.3	7.7
Total	187			

Table 74 (continued)

Language Arts

Grade	Number Tested	NCE		
		Pretest	Posttest	Gain
K	13	30.1	41.2	11.1
1	30	36.5	41.9	5.4
2	27	45.0	43.0	-2.0
3	18	34.8	39.9	5.1
4	13	42.4	43.0	0.6
5	11	36.4	38.0	1.6
6	19	38.5	48.5	10.0
7	8	30.8	40.0	9.2
8	8	35.4	37.4	2.0
9	5	42.3	43.0	0.7
10	4	31.8	35.7	3.9
11	5	36.4	39.2	2.8
12	3	47.4	50.7	3.3
Total	164			

OREGON

Oregon's migrant education projects served 8,764 regular term students and 5,186 summer term students in pre-kindergarten through grade 12. Participants in both terms received instructional services in English to students of limited English background, reading, language arts, mathematics, vocational/career education, and multi-cultural education. During both terms, instructional services were provided to participants in the following programs: preschool, GED/HEP, and PASS (Portable Assisted Study Sequence). Regular term and summer term secondary participants received tutorial services and participated in special activities. Also, regular term gifted participants received instructional services. Summer term elementary participants received tutorial services. Summer term participants also received health education/safety and computer literacy. Supporting services provided in both terms included attendance, social work, and guidance; health; dental; nutrition; and pupil transportation.

Oregon administered the following tests during the regular term: CTBS (Comprehensive Test of Basic Skills) in reading, mathematics, and language arts; SAT (Student Achievement Test) in reading and mathematics; MAT (Metropolitan Achievement Test) in language, mathematics, and reading; SRA Achievement (Science Research Associates) in reading and language arts; and LAS (Language Assessment Scales).

Table 75 provides pretest, posttest, and gain NCEs as well as the number tested, by subject area and grade, for participants tested on an annual test cycle. In reading, NCE gains ranged from 12.7 (grade 1) to -27.7 (ungraded). For mathematics, NCE gains ranged from 24.3 (grade 1) to -26.0 (ungraded). For language arts, NCE gains ranged from 30.6 (grade 1) to -9.0 (grade 10).

Oregon did not provide achievement information for the summer term.

Table 75

Chapter 1 Migrant Education Achievement Results
for Students Tested on an Annual Schedule,
by Subject Area, 1987-88

Oregon

Reading

Grade	Number Tested	NCE		
		Pretest	Posttest	Gain
K	2	32.5	44.5	12.0
1	28	30.3	43.0	12.7
2	168	42.2	44.6	2.4
3	188	41.1	37.4	-3.7
4	165	40.5	43.3	2.8
5	155	40.1	40.1	0.0
6	128	42.8	45.0	2.2
7	123	42.1	42.9	0.8
8	99	41.4	43.6	2.2
9	34	42.7	47.6	4.9
10	32	38.0	35.7	-2.3
11	24	46.4	45.7	-0.7
12	13	40.9	32.4	-8.5
UG*	1	34.4	6.7	-27.7
Total	1,160			

Mathematics

Grade	Number Tested	NCE		
		Pretest	Posttest	Gain
K	1	43.0	32.0	-11.0
1	18	27.6	51.9	24.3
2	166	48.1	51.0	2.9
3	175	47.9	42.9	-5.0
4	144	45.8	48.1	2.3
5	161	44.5	43.9	-0.6
6	115	49.9	50.4	0.5
7	122	50.2	48.3	-1.9
8	95	47.6	48.5	0.9
9	34	43.2	47.5	4.3
10	32	46.4	44.3	-2.1
11	23	47.4	43.7	-3.7
12	13	40.5	43.7	3.2
UG*	3	48.1	22.1	-26.0
Total	1,102			

* Ungraded

Table 75 (continued)

Language Arts

Grade	Number Tested	NCE		
		Pretest	Posttest	Gain
K	--	--	--	--
1	5	21.8	52.4	30.6
2	63	46.3	40.8	-5.5
3	168	40.8	41.2	0.4
4	140	42.2	43.9	1.7
5	141	41.6	41.1	-0.5
6	118	44.8	49.4	4.6
7	109	45.3	45.7	0.4
8	81	43.3	47.6	4.3
9	28	41.7	46.9	5.2
10	27	47.7	38.7	-9.0
11	24	44.6	47.4	2.8
12	13	36.4	35.8	-0.6
UG*	2	36.5	39.0	2.5
Total	919			

* Ungraded

PENNSYLVANIA

Pennsylvania's migrant education projects served 2,444 regular term students in pre-kindergarten through grade 12. Instructional services were provided in English to students of limited English background, reading, language arts, mathematics, and vocational/career education. Other instructional services included health education/safety, computer literacy, and multi-cultural education. Students also participated in special activities. Tutorial services were provided to secondary and elementary students. Gifted and handicapped students received services. Supporting services included attendance, social work, and guidance; health; dental; nutrition; pupil transportation; and needs assessment. During the summer term, 1,278 students in pre-kindergarten through grade 12 were served. Summer term participants received about the same instructional services as those provided to regular term participants. However, handicapped and gifted participants were not served. Also, there was participation in PASS (Portable Assisted Study Sequence). Supporting services in the summer term included attendance, social work, and guidance; health; dental; nutrition; pupil transportation; and needs assessment. At-risk students were also served.

Pennsylvania provided summary achievement information for the regular term. Scores by subject were not provided. However, the following data were reported, in NCEs, by grade span, for the fall-to-spring and annual test cycles.

Grades 1-3 (fall to spring)	7.4 NCE gain
Grades 4-6 (fall to spring)	10.2 NCE gain
Grades 1-3 (spring to spring)	3.4 NCE gain
Grades 4-6 (spring to spring)	5.5 NCE gain

Participants were tested using the Migrant Education Criterion Referenced Test (CRT), the LAS (Language Assessment Scale) and the TELS (Test of Essential Learning Skills). Pennsylvania's State Performance Report explains the results of TELS.

The Test of Essential Learning Skills (TELS) was administered to students as part of the Pennsylvania Assessment System. All third, fifth, and eighth grade public school students, migrant as well as non-migrant, are given this assessment in March of each year. The tests were based on skill objectives for reading and mathematics.

In all grades, for both reading and mathematics, TELS results showed that migrant students are in more need of remediation than is the non-migrant population. Based on a comparison between migrant and non-migrant students who were administered the TELS:

- For migrant students, the highest percentages of students needing remediation were in 3rd grade reading (63.2 percent), 8th grade reading (54.7 percent), and 5th grade reading (50.6 percent).

- For non-migrant students, the highest percentages of students needing remediation were in 5th grade reading (27.2 percent), 3rd grade reading (27.0 percent), and 8th grade mathematics (25.9 percent).

Summer term achievement data were not provided.

PUERTO RICO

Puerto Rico's migrant education projects served 9,160 regular term students in pre-kindergarten through grade 12. Instructional services were provided in English to students of limited English background, reading, mathematics, and Spanish reading and language arts. Supporting services included attendance, social work, and guidance; health; dental; nutrition; pupil transportation; ophthalmology; radiology and laboratory. There were no summer term projects.

The Test of Basic Skills provided criterion-referenced achievement data for the regular term gathered on an annual basis. The achievement information was reported as percentages of skills mastered by subject area and grade. Aggregate test score information was provided for English, Spanish, and mathematics. For seventh through ninth graders tested in Spanish and English, separate scores were provided for reading and language.

Table 76 provides, for participants in the six regions combined, the average number of skills tested, the average number of skills mastered, the average number of skills not mastered, and the average percentage of skills mastered, by subject area (English, Spanish, and mathematics) and grade. Participants tested in Spanish had an average percentage of skills mastered ranging from 88 percent (grade 2) to no skills mastered (grades 7 and 8 reading, grade 8 language, and grade 9 reading and language). Participants tested in English had an average percentage of skills mastered ranging from 62 percent (grade 4) to no skills mastered (grade 5 and grades 7 and 8 reading). Participants tested in mathematics had an average percentage of skills mastered ranging from 80 percent (grade 2) to no skills mastered (grade 8).

Table 77 provides a duplicated count of migrant participants tested, by subject area.

Table 76

Achievement Results -- Skills Mastered,
by Subject Area and Grade, 1987-88

Puerto Rico

Spanish

Grade	Average Number of Skills Tested	Average Number of Skills Mastered	Average Number of Skills Not Mastered	Average Percentage of Skills Mastered
2	8	7	1	88%
3	9	3	6	33%
4	15	12	3	80%
5	16	8	8	50%
6	15	8	7	53%
Reading 7	4	0	4	0%
Language 7	10	2	8	20%
Reading 8	5	0	5	0%
Language 8	11	0	11	0%
Reading 9	7	0	7	0%
Language 9	12	0	12	0%

Table 76 (continued)

English

Grade	Average Number of Skills Tested	Average Number of Skills Mastered	Average Number of Skills Not Mastered	Average Percentage of Skills Mastered
4	16	10	6	62%
5	10	0	10	0%
6	12	7	5	58%
Reading 7	5	0	5	0%
Language 7	8	1	7	11%
Reading 8	6	0	6	0%
Language 8	5	2	3	40%
Reading 9	6	1	5	16%
Language 9	8	2	6	25%

Mathematics

Grade	Average Number of Skills Tested	Average Number of Skills Mastered	Average Number of Skills Not Mastered	Average Percentage of Skills Mastered
2	10	8	2	80%
3	13	3	10	23%
4	10	5	5	50%
5	14	2	12	14%
6	18	7	11	39%
7	13	1	12	7%
8	15	0	15	0%
9	16	16	0	16%

Table 77

Number of Chapter 1 Migrant Participants Tested, by Subject Area, 1987-88

Puerto Rico

Duplicate Count SY 1987-88

Subject	Number of Participants Tested
Spanish	1,347
Mathematics	1,205
English	800
Total	3,352

RHODE ISLAND

During the regular term, 77 students in grade 1 through grade 12 received migrant education services. The only service received during the regular term was other instructional. There were 26 summer term participants in grade 1 through grade 9. Instructional services included reading, mathematics, and arts/crafts. Summer term participants also went on field trips. Supporting services included nutrition and pupil transportation.

Based on criterion-referenced measures, participants were tested in reading and mathematics in the summer term. For reading, the Botel Reading Inventory was used. For mathematics, the Scott, Foresman/Radio Shack Test was used, and testing was performed in the following sub-areas--addition, subtraction, multiplication, and division. The results were reported in correlations of grade level to lessons.

No achievement information was provided for the regular term.

SOUTH CAROLINA

South Carolina's migrant education projects provided services to 123 regular term students in pre-kindergarten through grade 12 (excluding grade 9). Participants received instructional services in reading and mathematics. Preschool participants also received instructional services. Supporting services included attendance, social work, and guidance; health; dental; nutrition; and pupil transportation. Library and psychological services were also provided. Summer term services were provided to 558 students in pre-kindergarten through grade 11. Except for psychological services, the same instructional and supporting services that were offered in the regular term were offered in the summer term.

South Carolina provided pre- and post-test achievement data for reading and mathematics in the regular term. The test used was the Comprehensive Test of Basic Skills (CTBS). Data were reported in NCEs for an annual testing cycle.

Table 78 provides pretest, posttest, and gain NCEs, as well as the number tested, by subject area and grade, for participants tested on an annual test cycle. In reading, gains ranged from 19.8 NCEs (grade 1) to 0.0 NCEs (grade 3). Gains for participants tested in mathematics ranged from 22.3 NCEs (grade 9) to 12.7 NCEs (grade 1).

During the summer term, teacher-judgment tests with respect to criterion-referenced instructional curriculum were used.

Gains in developmental skills were reported for participants who were three and four years old in pre-kindergarten and for participants who were five and six years old in developmental programs during the summer term. The number and percent of participants who "gained," "lost," were "unchanged," and "not judged" were provided by skill area.

Results indicated that most participants, between 91 percent and 63 percent depending on skill area and grade level, gained skills. Less than 1 percent who were tested lost skills. The remaining were "unchanged" or "not judged."

Summer students in grades 1 through 12, who participated in the interstate reading and mathematics programs, were given objectives to master. Two hundred and ninety-two (292) students were evaluated. Objectives mastered ranged from 5.27 (grades 7 through 12, migrant reading program) to 2.30 (grades 7 through 12, basic math program).

Table 78

Chapter 1 Migrant Education Achievement Results
for Students Tested on an Annual Schedule,
by Subject Area, 1987-88

South Carolina

Reading

Grade	Number Tested	NCE		
		Pretest	Posttest	Gain
K	--	--	--	--
1	14	30.3	50.1	19.8
2	20	33.8	43.8	10.0
3	20	31.1	31.1	0.0
4	--	--	--	--
5	--	--	--	--
6	--	--	--	--
7	--	--	--	--
8	--	--	--	--
9	10	25.3	28.2	2.9
10	--	--	--	--
11	--	--	--	--
12	--	--	--	--
Total	64			

Mathematics

Grade	Number Tested	NCE		
		Pretest	Posttest	Gain
K	--	--	--	--
1	14	31.4	44.1	12.7
2	20	38.4	53.3	14.9
3	20	27.3	40.1	12.8
4	--	--	--	--
5	--	--	--	--
6	--	--	--	--
7	--	--	--	--
8	--	--	--	--
9	10	41.9	64.2	22.3
10	--	--	--	--
11	--	--	--	--
12	--	--	--	--
Total	64			

SOUTH DAKOTA

The regular term migrant education projects in South Dakota provided services to 44 students in pre-kindergarten through grade 12 (excluding grade 7). Instructional services were provided in reading and mathematics. Regular term preschool participants also received instructional services. Supporting services consisted of attendance; social work; and guidance, and health. During the summer term, services were provided to 37 students in pre-kindergarten through grade 11 (excluding grade 8 and grade 10). Summer term participants received instructional services in reading, mathematics, and language arts. Pupil transportation was the only supporting service offered.

South Dakota provided pre- and post-test achievement data for reading, mathematics, and language arts for the regular term. A norm-referenced test, the Stanford Achievement Test (SAT), was used. In addition, the Peabody Individual Achievement Test (PIAT) was given to students in grades 1 through 3. Data were reported in NCEs for an annual testing cycle.

Table 79 provides pretest, posttest, and gain NCEs as well as the number tested, by subject area and grade, for participants tested on an annual test cycle. In reading, gains ranged from 12.0 NCEs (grade 11) to -1.6 NCEs (grade 4). In mathematics, gains ranged from 8.5 NCEs (grade 2) to 2.6 NCEs (grade 5). In language arts, gains ranged from 8.5 NCEs (grade 2) to -2.9 NCEs (grade 5).

Preschoolers were administered the Boehm Test of Basic Concepts or the Utah Test of Language Development. The Test of Basic Experience II (TOBE) was used to evaluate children who attended the regular district kindergarten program half days.

The summer term project was encouraged to administer teacher-made diagnostic tests. However, no summer achievement information was provided.

Table 79

Chapter 1 Migrant Education Achievement Results
for Students Tested on an Annual Schedule,
by Subject Area, 1987-88

South Dakota

Reading

Grade	Number Tested	NCE		
		Pretest	Posttest	Gain
K	--	--	--	--
1	3	47.8	54.0	6.2
2	4	51.8	51.4	-0.4
3	1	50.0	57.0	7.0
4	3	55.3	53.7	-1.6
5	3	48.8	57.1	8.3
6	1	57.0	58.7	1.7
7	--	--	--	--
8	2*	*	*	*
9	2*	*	*	*
10	--	--	--	--
11	2	33.7	45.7	12.0
12	2	32.5	39.8	7.3
Total	19			

Mathematics

Grade	Number Tested	NCE		
		Pretest	Posttest	Gain
K	--	--	--	--
1	3	44.6	51.9	7.3
2	4	40.6	49.1	8.5
3	1	44.7	50.5	5.8
4	3	37.9	44.2	6.3
5	3	44.5	47.1	2.6
6	1	56.4	59.3	2.9
7	--	--	--	--
8	2*	*	*	*
9	2*	*	*	*
10	--	--	--	--
11	2	51.6	57.0	5.4
12	2	33.5	40.8	7.3
Total	19			

* Results cannot be compared since different tests were used.

Table 79 (continued)

Language Arts

Grade	Number Tested	NCE		
		Pretest	Posttest	Gain
K	--	--	--	--
1	3	59.6	65.0	5.4
2	4	41.2	49.7	8.5
3	1	43.0	45.2	2.2
4	3	50.3	50.7	0.4
5	3	52.3	49.4	-2.9
6	1	42.5	45.2	2.7
7	--	--	--	--
8	2*	*	*	*
9	2*	*	*	*
10	--	--	--	--
11	2	35.0	42.0	7.0
12	2	28.8	35.7	6.9
Total	19			

* Results cannot be compared since different tests were used.

TENNESSEE

Migrant education projects in Tennessee provided services to 112 regular term students in kindergarten through grade 12. Participants received instructional services in reading and mathematics. There were no supporting services. Summer term services were provided to 243 students in pre-kindergarten through grade 10. Instructional services were provided in English to students of limited English background, reading, language, mathematics, art, music, physical education, computers, science, social studies, and geography. Supporting services included attendance, social work, and guidance; health; dental; nutrition; pupil transportation; and clothing.

Two school districts provided achievement data for participants during the regular term. One school district used the Stanford Achievement Test for reading and mathematics. All the students were in the program for more than 12 weeks.

Table 80 provides gain NCEs as well as the number tested, by subject area and grade, for participants tested on a fall-to-spring test cycle. However, pretest and posttest scores were not available. For reading, NCE gains ranged from 40.4 (grade 1) to -7.1 (kindergarten). For mathematics, NCE gains ranged from 30.5 (grade 2) to -1.1 (grade 9).

The second school district used a criterion-referenced test, the Basic Skills First Program, to measure skills acquired during the regular term. The students were in the program from 3 to 12 weeks.

Table 81 provides gain scores as well as the number tested, by subject area and grade, for students tested on a fall-to-spring test cycle. For reading, gain scores ranged from 5.0 (grade 5) to 1.0 (kindergarten). For mathematics, gain scores ranged from 5.0 (grade 5) to -0.7 (grade 1).

During the summer term, six school districts provided migrant projects. In order to evaluate the programs that were provided for migrant students in the summer, two instruments were used. The Basic Skills First Program was used by four LEAs. The remaining two LEAs used a criterion-referenced test which was developed for the Tennessee Migrant Program. In addition, teacher-made tests were used in measuring progress in the music, art, and physical education service areas.

Since the districts did not test and report achievement data in a uniform manner, the data could not be aggregated.

Table 82 provides, by grade, the number of students tested and the number of skills acquired for reading and mathematics. For reading, skills acquired ranged from 4.4 (grade 6) to 2.8 (grade 1). For mathematics, skills acquired ranged from 6.4 (grade 7) to 2.8 (grade 4).

The remaining two LEAs used a criterion-referenced test which was developed for the Tennessee Migrant Program. In addition, teacher-made tests were used in measuring progress in the music, art, and physical education service areas.

Table 83 provides (for one LEA), by grade, the number of students tested and the number of skills gained for reading, mathematics, physical education, and oral language. For reading, skills gained ranged from 4.0 (grade 3) to 1.7 (grade 1). For mathematics, skills gained ranged from 4.0 (grade 3) to 1.3 (grade 1). Students tested in physical education had skills gains ranging from 10.0 (grades 3, 4, 8 and 9) to 3.3 (grade 1). Students tested in oral language had skills gains ranging from 5.5 (grade 4) to 3.0 (PreK).

The other LEA that used the Tennessee Criterion Referenced Test reported scores by levels of the test since the program is largely ungraded. Table 84 provides, by test level, the number of students tested and the number of skills gained for reading, mathematics, and readiness.

One school system provided music, art, and physical education classes for the migrant students in the summer programs. Teacher-developed tests were used. Students were in the program three to six weeks.

Table 85 provides, by grade, the number of students tested and the number of skills mastered for music, art, and physical education. For music, skills gained ranged from 5.5 (grade 4) to 2.3 (grade 1). For art, skills gained ranged from 4.5 (grade 5) to 2.0 (grade 1). For physical education, skills gained ranged from 11.3 (grade 1) to 5.5 (grade 4).

Table 80

Chapter 1 Migrant Education Achievement Results
for Students Tested on a Fall-Spring Schedule,
by Subject Area, 1987-88

Tennessee

Reading

Grade	Number Tested	NCE Gain
K	2	-7.1
1	3	40.4
2	8	21.4
3	9	15.3
4	5	2.9
5	9	8.2
6	2	7.6
7	8	10.0
8	6	3.7
9	4	1.1
10	--	--
11	1	22.6
12	--	--
Total	57	

Mathematics

Grade	Number Tested	NCE Gain
K	1	22.4
1	3	23.5
2	8	30.5
3	9	22.1
4	5	29.1
5	9	10.6
6	2	10.7
7	8	10.7
8	6	3.0
9	5	-1.1
10	2	20.5
11	--	--
12	1	24.3
Total	59	

Table 81

Gain Scores on the Basic Skills First Objective, on a Fall-Spring Schedule, by Subject Area, 1987-88

Tennessee

Reading

Grade	Number Tested	Gain Score
K	5	1.0
1	3	1.7
2	2	2.5
3	--	--
4	3	1.7
5	1	5.0
6	2	2.5
7	--	--
8	--	--
9	--	--
10	--	--
11	--	--
12	--	--
Total	16	

Mathematics

Grade	Number Tested	Gain Score
K	5	1.6
1	3	-0.7
2	2	1.5
3	--	--
4	3	1.7
5	1	5.0
6	2	3.0
7	--	--
8	--	--
9	--	--
10	--	--
11	--	--
12	--	--
Total	16	

Table 82

Skills Mastered (Weighted Mean) on the Basic Skills
First Program, Summer Term, 1988

Tennessee

	Reading		Mathematics	
Weeks in Programs:	3-6		3-6	
Grade	Number Tested	Skills	Number Tested	Skills
PreK	6	3.5	6	3.5
K	16	3.9	16	3.3
1	22	2.8	22	3.3
2	16	3.7	16	4.2
3	19	3.8	19	3.7
4	25	4.1	25	2.8
5	27	3.2	27	4.6
6	14	4.4	14	5.4
7	8	4.1	8	6.4
8	4	4.0	4	6.0
9	4	3.0	5	4.4
Total	161		162	

Table 83

Skills Mastered (Weighted Mean) on the Tennessee Migrant Education Criterion-Referenced Test, Summer Term, 1988

Tennessee

	Reading		Mathematics		P.E.		Oral Language	
Weeks in Programs:	3-6		3-6		3-6		3-6	
Grade	Number Tested	Skills	Number Tested	Skills	Number Tested	Skills	Number Tested	Skills
PreK	--	--	--	--	--	--	6	3.0
K	2	3.0	2	3.0	2	5.0	7	3.9
1	3	1.7	3	1.3	10	3.3	9	3.7
2	--	--	--	--	2	5.0	5	4.2
3	1	4.0	1	4.0	1	10.0	4	4.5
4	--	--	--	--	1	10.0	6	5.5
5	--	--	--	--	--	--	8	4.3
6	--	--	--	--	--	--	5	3.8
7	--	--	--	--	2	4.5	2	4.5
8	--	--	--	--	1	10.0	3	5.0
9	--	--	--	--	1	10.0	--	--
10	--	--	--	--	--	--	--	--
11	--	--	--	--	--	--	--	--
12	--	--	--	--	--	--	--	--
Total	6		6		20		55	

Table 84

Skills Mastered on the Tennessee Migrant Education Criterion-Referenced Test, Summer Term, 1988

Tennessee

Reading

Test Level	Number Tested	Skills Gained
K	--	--
A	8	4
B	12	5
C	8	5
D	5	4
E	--	--
F	1	6
Total	34	

Mathematics

Test Level	Number Tested	Skills Gained
K	--	--
A	3	2
B	13	3
C	21	4
D	8	4
E	--	--
F	5	3
Total	50	

Readiness

Test Level	Number Tested	Skills Gained
K	7	3
A	--	--
B	--	--
C	--	--
D	--	--
E	--	--
F	--	--
Total	7	

Table 85

Skills Mastered on Teacher-Developed Tests,
Summer Term 1988

Tennessee

Music

Grade	Number Tested	Skills Mastered
1	3	2.3
2	3	5.3
3	--	--
4	2	5.5
5	2	3.5
Total	10	

Art

Grade	Number Tested	Skills Mastered
1	3	2.0
2	3	4.0
3	--	--
4	2	3.5
5	2	4.5
Total	10	

Physical Education

Grade	Number Tested	Skills Mastered
1	3	11.3
2	3	5.7
3	--	--
4	2	5.5
5	2	7.0
Total	10	

TEXAS

Migrant education projects in Texas served 57,970 regular term students and 3,196 summer term students in pre-kindergarten through grade 12. Participants in both terms received English to students of limited English background, reading, language arts, and mathematics. Other instructional services were also provided, but were not specified. For both terms, supporting services included attendance, social work, and guidance; health; dental; nutrition; and pupil transportation. In both terms, other supporting services were provided, but were not specified.

Texas provided pre- and post-test achievement data for reading and mathematics for the regular term. Data were reported in NCEs for an annual testing cycle.

Table 86 provides pretest, posttest, and gain NCEs, as well as the number tested, by subject area and grade, for participants tested on an annual test cycle. Participants tested in reading showed gains ranging from 1.8 NCEs (grade 9) to -1.6 NCEs (grade 12). In mathematics, NCE gains ranged from 3.9 (grade 5) to -0.7 (grade 3).

Achievement data were not provided for the summer term.

Table 86

Chapter 1 Migrant Education Achievement Results for Students Tested on an Annual Schedule, by Subject Area, 1987-88

Texas

Reading

Grade	Number Tested	NCE		
		Pretest	Posttest	Gain
K	--	--	--	--
1	--	--	--	--
2	1,789	38.9	39.6	0.7
3	2,446	33.7	35.0	1.3
4	2,462	32.1	33.4	1.3
5	2,852	32.4	33.1	0.7
6	3,062	33.1	34.2	1.1
7	2,728	31.6	32.8	1.2
8	2,565	31.1	31.2	0.1
9	1,572	27.6	29.4	1.8
10	1,303	29.5	29.1	-0.4
11	903	30.5	30.7	0.2
12	689	31.3	29.7	-1.6
Total	22,371			

Mathematics

Grade	Number Tested	NCE		
		Pretest	Posttest	Gain
K	--	--	--	--
1	--	--	--	--
2	1,039	48.9	51.1	2.2
3	1,373	49.3	48.6	-0.7
4	1,626	44.3	45.0	0.7
5	1,919	42.1	46.0	3.9
6	1,685	47.6	48.8	1.2
7	1,211	41.4	41.8	0.4
8	1,129	40.2	39.7	-0.5
9	856	36.6	39.0	2.4
10	483	36.9	39.9	3.0
11	311	37.8	39.5	1.7
12	180	40.4	41.6	1.2
Total	11,812			

UTAH

Utah's migrant education projects served 35 regular term students in kindergarten through grade 12 (excluding grade 3). Participants received instructional services in English to students of limited English background, reading, language arts, mathematics, vocational/career education, social studies, geography, art, physical education, music, and computers. Supporting services included attendance, social work, and guidance; health; dental; nutrition; and pupil transportation. During the summer term, 992 students in pre-kindergarten through grade 12 received services. Participants in the summer term received almost the same instructional and supporting services as participants in the regular term. However, vocational/career education was not provided during the summer term.

The Wide Range Achievement Test (WRAT) was used during the summer term. The WRAT is a norm-referenced test. Participants were tested in reading, spelling, and arithmetic. Data were reported as raw scores.

Table 87 provides average raw pretest scores, average raw posttest scores, and the difference between pre-post raw scores, as well as the number tested, by subject area and grade, for participants tested during the summer of 1988. For reading, raw gains ranged from 7.4 (grade 10) to -0.7 (grade 7). For spelling, raw gains ranged from 4.4 (grade 10) to -0.3 (grade 7). For arithmetic, raw gains ranged from 4.6 (grade 9) to 0.7 (PreK).

Achievement information was not provided for the regular term.

Table 87

WRAT-R Data for the Migrant Education Program,
by Subject Area, Summer 1988

Utah

Reading

Grade	Number of Students Who Took Post-Test	Pre-Test Average Raw Scores	Post-Test Average Raw Scores	Difference Between Pre-Post Raw Scores
PreK	12	9.4	9.0	-0.4
K	47	12.5	15.4	2.9
1	58	31.2	37.0	5.8
2	60	46.8	52.9	6.1
3	56	52.0	58.6	6.6
4	39	59.5	65.6	6.1
5	41	59.9	62.7	2.8
6	34	50.9	54.7	3.8
7	15	44.9	44.2	-0.7
8	13	43.0	47.8	4.8
9	12	44.5	47.0	2.5
10	10	43.1	50.5	7.4
11	3	44.3	50.0	5.7
12	4	37.3	40.5	3.2
Total	404			

Table 87 (continued)

Spelling

Grade	Number of Students Who Took Post-Test	Pre-Test Average Raw Scores	Post-Test Average Raw Scores	Difference Between Pre-Post Raw Scores
PreK	12	8.3	11.1	2.8
K	47	13.6	16.2	2.6
1	58	23.5	26.3	2.8
2	60	30.8	32.9	2.1
3	56	33.6	37.3	3.7
4	39	38.0	40.7	2.7
5	41	35.7	38.3	2.6
6	34	26.8	29.1	2.3
7	15	24.3	24.1	-0.3
8	13	23.9	27.3	3.4
9	12	24.0	26.1	2.1
10	10	20.9	25.3	4.4
11	3	19.0	21.3	2.3
12	4	13.0	15.5	2.5
Total	404			

Arithmetic

Grade	Number of Students Who Took Post-Test	Pre-Test Average Raw Scores	Post-Test Average Raw Scores	Difference Between Pre-Post Raw Scores
PreK	12	3.5	4.2	0.7
K	47	8.5	10.3	1.8
1	58	15.6	17.8	2.2
2	60	19.9	22.4	2.5
3	56	23.0	25.1	2.1
4	39	26.1	28.1	2.0
5	41	27.8	29.1	1.3
6	34	25.2	27.9	2.7
7	15	26.2	29.3	3.1
8	13	28.3	30.0	1.7
9	12	26.8	31.4	4.6
10	10	25.6	29.3	3.7
11	3	34.3	38.0	3.7
12	4	21.3	24.3	3.0
Total	404			

VERMONT

Vermont's migrant education projects provided services to 806 regular students in pre-kindergarten through grade 12. Instructional services were provided in reading and vocational/career education. Supporting services included attendance, social work, and guidance; health; dental; pupil transportation; and needs assessment. The summer term projects served 284 students in pre-kindergarten through grade 11. Instructional services included reading and vocational/career education. Summer term supporting services included nutrition and pupil transportation.

No achievement information was provided.

VIRGINIA

The migrant education projects in Virginia provided services to 530 regular term students in pre-kindergarten through grade 12. Services were also provided to 467 summer term students in pre-kindergarten through grade 11. For both terms, instructional services were provided in English to students of limited English background, reading, language arts, and mathematics. Supporting services provided during the regular term included attendance, social work, and guidance; health; dental; and nutrition. Summer term supporting services included those found in the regular term plus pupil transportation.

In the regular term, achievement data were provided by project, but could not be aggregated statewide because the information was not reported in a uniform manner. All projects administered a criterion referenced test. Three districts tested in reading and one district tested in mathematics. A total of 84 participants were tested in reading and 54 in mathematics. (Table 88)

Two districts submitted norm-referenced gains in the summer term in reading and mathematics. The Curriculum Referenced Test of Mastery was used in both projects. A total of 121 participants were tested in reading, and gain scores ranged from 39.1 NCEs in grade 6 to -5.7 NCEs in grade 5. In mathematics, 117 participants were tested, with average gain scores ranging from 23.6 NCEs in grade 4 to -5.1 NCEs in grade 5. (Table 89)

Table 88

Summary of District Level Achievement Information -- 1987-88

Virginia

District	Number Tested in Reading	Number Tested in Mathematics	Data Reported by Grade Level	Type of Data Reported
A	18	0	No	Average Raw Score Gain
B	12	0	No	Pretest, Posttest, and Gain Average Percentile
C	54	54	Yes	Pretest and Posttest Average Grade Level
D[a/]	0	0	No	--
Total Number Tested	84	54		

a/ Participants tested only for English as a Second Language.

Table 89

Chapter 1 Migrant Education Results for Students
Tested in the Summer Term, by Subject Area -- 1987-88

Virginia

Reading

Grade	Tested	Average NCE Gain
1	36	22.0
2	25	16.5
3	22	14.7
4	22	30.7
5	7	-5.7
6	9	39.1
Total	121	

Mathematics

Grade	Tested	Average NCE Gain
1	36	20.6
2	23	15.7
3	21	9.1
4	23	23.6
5	5	-5.1
6	9	19.2
Total	117	

WASHINGTON

Migrant education projects in Washington served 10,678 regular term students and 2,900 summer term students in pre-kindergarten through grade 12. In both terms, instructional services were provided in English to students of limited English background, reading, language arts, mathematics, and readiness. Secondary students were provided other instructional services, but they were not specified. Supporting services provided during both terms included attendance, social work, and guidance; health; dental; nutrition; and pupil transportation.

School districts in Washington submitted pre- and post-test achievement data for reading, mathematics, and language arts for the regular term. Only eight grade groups had ten or more students tested. (The total number tested was 57 in reading, 114 in mathematics, 170 in oral language development, and 35 in language arts/communication). According to the Washington SEA, with these low numbers per grade, the amount of measurement error was substantial. For this reason and because the data were not representative of the students served, SEA officials requested that the data not be released publicly.

Washington has a statewide assessment program. The Metropolitan Achievement Test (MAT6) was administered to all students in grades 4, 8, and 10 during the first week in October. State-level results were prepared for the general student population and for select student subgroups. Tests were administered in reading, mathematics, and language arts. Small numbers of Chapter 1 migrant students were tested in the fall testing of 1988 as a part of the state program. Because the data are not representative of the number served in academic programs, the SEA did not provide the data.

No achievement data were provided for the summer term.

WEST VIRGINIA

During the regular term, migrant education projects in West Virginia served 56 students in kindergarten through grade 12 (excluding grade 11). Instructional services were provided in English to students of limited English background, reading, and language arts. Supporting services included attendance, social work, and guidance, and pupil transportation. Other supporting services were also provided, but were not specified. Forty-three students in kindergarten through tenth grade (with the exception of third and eighth grades) were provided services during the summer term. Participants in the summer term received the following instructional services: English to students of limited English background, reading, language arts, and mathematics. Supporting services included attendance, social work, and guidance; health; dental; nutrition; and pupil transportation.

No achievement data were provided for either the regular term or the summer term.

WISCONSIN

Wisconsin's migrant education projects provided services to 768 regular term students and 611 summer term students in pre-kindergarten through grade 12. In both terms, participants received services in English to students of limited English background, reading, language arts, vocational/career education, and computer literacy. Tutorial services were provided to elementary and secondary students. Also, students participated in special activities and preschool participants were provided instructional services. During the summer term gifted students received educational services. Also, there were summer participants in PASS (Portable Assisted Study Sequence). During the regular term, supporting services were provided in attendance, social work, and guidance; health; dental; nutrition; and pupil transportation. The same supporting services, plus needs assessment, were provided during the summer term.

For summer term participants, Wisconsin used point-in-time testing for reading, language arts, and mathematics. The 3R's classroom edition was used. Composite scores, for these three subjects, were provided for grade 3 and grade 6. For grade 3, 39 students were tested with an average NCE gain of 41.6. For grade 6, 16 students were tested with an average NCE gain of 43.1.

Competency judgments, made by the teacher however he/she deems appropriate, were also provided for the summer of 1988. Teachers could use a variety of competency tests, such as criterion-referenced tests, teacher-developed tests, an evaluation of student work samples, or observation. Summer testing for competency occurred no more than five times during the summer term, i.e., approximately once a week.

Table 90 provides the number of students making progress toward proficiency on competencies and the number tested, by subject area, for the summer of 1988. For each subject (reading, mathematics, and language arts, around 90 percent of the students were making progress toward proficiency on at least one competency.

Table 91 provides the number of students achieving proficiency on competencies and the number tested, by subject area, for the summer of 1988. For reading, about 15 percent of the students achieved proficiency on at least one competency. For mathematics, about 21 percent of the students achieved proficiency on at least one competency, while for language arts, 18 percent of the students achieved proficiency on at least one competency.

Achievement data were not provided for the regular term.

Table 90

Number of Students Making Progress Toward Proficiency on Competencies, Summer 1988

Wisconsin

Subject	Number Tested	Number of Competencies			
		0	1 or 2	3 or 4	5 or More
Reading	374	38	129	151	56
Mathematics	349	31	102	153	63
Language Arts	381	37	126	124	94
Total	1,104				

Table 91

Number of Students Achieving Proficiency on Competencies, Summer 1988

Subject	Number Tested	Number of Competencies			
		0	1 or 2	3 or 4	5 or More
Reading	374	320	45	8	1
Mathematics	349	277	59	6	7
Language Arts	381	312	50	8	11
Total	1,104				

WYOMING

Wyoming's regular term migrant education projects served 8 students in pre-kindergarten and grades 1 through 5. Participants received services in English to students of limited English background and vocational/career education. Instructional services were also provided to preschool students. Supporting services were not provided. Summer term projects served 477 students in pre-kindergarten through grade 12. The same instructional services provided during the regular term were also provided during the summer term. Summer supporting services include attendance, social work, and guidance; health; dental; nutrition; pupil transportation; and computer literacy.

Wyoming's summer migrant education projects used the National Migrant Education Skills Program for each individual student. The objective for each project was to have each student accomplish at least 1 skill for each two days of attendance. No quantitative data were reported.

Regular term achievement data were not provided.

APPENDIX A -- METHODOLOGY

The U.S. Department of Education (ED) received State Performance Reports for 1987-88 in the winter and early spring of 1989, and proceeded to enter the participation information into LOTUS 1-2-3 files.

Decision Resources Corporation (DRC), contracted by the Office of Planning, Budget and Evaluation (OPBE) to review, correct, and summarize the State Performance Reports, performed edit checks on the participation information and reviewed the achievement information provided by the SEAs. The purpose of the edit checks was to flag potential problems, not to claim that the information was necessarily in error.

The edit process for the participation data focused on examining the information submitted for 1987-88, and highlighting year-to-year changes that appeared to be unusually high.

DRC subsequently prepared state-by-state listings of the information submitted by the SEAs, highlighting any data items that were identified through the edit process, and sent them to the SEAs for their review.

DRC staff then placed telephone calls to each SEA to elicit their response. In several instances, SEAs revised data for either 1986-87 or 1987-88.[1] However, in most cases, either the SEA responded that the information had been reviewed and was correct, or the SEA offered explanations for data items highlighted by the review process.

For the achievement data, SEAs were asked to verify or clarify DRC staff's understanding of the information that had been provided to ED.

At the conclusion of this process, DRC entered the revisions into the Chapter 1 migrant education data base and produced two documents for ED--a State Feedback Report for each SEA and this summary report entitled A Summary of State Chapter 1 Migrant Education Program Participation and Achievement Information for 1987-88, Volume 1: Participation and Volume 2: Achievement.

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[1]To the extent states revised their figures, the numbers found in this report will not correspond with those found in previous documents displaying State Performance Report information.

APPENDIX B -- ACHIEVEMENT INFORMATION FOR STATES REPORTING PRE/POST NORM REFERENCED NORMAL CURVE EQUIVALENT RESULTS, BY GRADE AND STATE

This appendix presents tabular displays of achievement information by grade for those states that provided data for the regular term using a norm referenced pre/post model and normal curve equivalent results. For each grade, the number tested, the pretest NCE score, the pretest percentile, the posttest NCE score, the posttest percentile, and the gain NCE are presented.

The tables are provided in the following order:

- Table B.1 -- participants tested on an annual test cycle in reading;
- Table B.2 -- participants tested on an annual test cycle in mathematics;
- Table B.3 -- participants tested on a fall-spring test cycle in reading; and
- Table B.4 -- participants tested on a fall-spring test cycle in mathematics.

Table B.1. Chapter 1 Migrant Education Reading Acheivement Results for Students Tested on an Annual Schedule -- 1987-88

Kindergarten

State	Number Tested	Pretest NCE	Pretest Percentile	Posttest NCE	Posttest Percentile	Gain NCE
Alabama	--	--	--	--	--	--
Alaska	--	--	--	--	--	--
California	--	--	--	--	--	--
Colorado	2	40.2	32	66.2	77	26.0
Connecticut	--	--	--	--	--	--
Florida	--	--	--	--	--	--
Georgia	--	--	--	--	--	--
Idaho	--	--	--	--	--	--
Louisiana	--	--	--	--	--	--
Maine	--	--	--	--	--	--
Mississippi	--	--	--	--	--	--
Nevada	--	--	--	--	--	--
New Jersey	--	--	--	--	--	--
New Mexico	--	--	--	--	--	--
Oklahoma	4	21.1	8	36.5	26	15.4
Oregon	2	32.5	20	44.5	39	12.0
South Carolina	--	--	--	--	--	--
South Dakota	--	--	--	--	--	--
Texas	--	--	--	--	--	--
Total	8	28.7	15	45.9	42	17.2

Grade 1

State	Number Tested	Pretest NCE	Pretest Percentile	Posttest NCE	Posttest Percentile	Gain NCE
Alabama	--	--	--	--	--	--
Alaska	--	--	--	--	--	--
California	--	--	--	--	--	--
Colorado	16	30.8	18	34.8	23	4.0
Connecticut	--	--	--	--	--	--
Florida	--	--	--	--	--	--
Georgia	3	21.7	8	44.7	40	23.0
Idaho	--	--	--	--	--	--
Louisiana	130	38.5	29	40.7	33	2.2
Maine	-	--	--	--	--	--
Mississippi	20	23.1	10	51.1	52	28.0
Nevada	--	--	--	--	--	--
New Jersey	--	--	--	--	--	--
New Mexico	--	--	--	--	--	--
Oklahoma	33	44.4	39	49.7	49	5.3
Oregon	28	30.3	17	43.0	37	12.7
South Carolina	14	30.3	17	50.1	50	19.8
South Dakota	3	47.8	45	54.0	57	6.2
Texas	--	--	--	--	--	--
Total	247	36.1	25	43.4	37	7.3

Table B.1. (cont'd)

Grade 2

State	Number Tested	Pretest NCE	Pretest Percentile	Posttest NCE	Posttest Percentile	Gain NCE
Alabama	24	34.8	23	40.2	32	5.4
Alaska	321	39.4	30	36.0	25	-3.4
California	1,087	35.2	24	38.8	29	3.6
Colorado	12	25.9	12	29.9	17	4.0
Connecticut	32	43.1	37	46.6	43	3.5
Florida	224	36.5	26	36.0	25	-0.5
Georgia	17	40.0	31	41.8	34	1.8
Idaho	105	35.1	24	38.0	28	2.9
Louisiana	248	46.0	42	44.4	39	-1.6
Maine	59	52.8	55	54.6	58	1.8
Mississippi	86	51.3	52	50.1	50	-1.2
Nevada	3	47.4	45	42.1	35	-5.3
New Jersey	23	47.8	45	48.7	47	0.9
New Mexico	6	27.4	14	26.7	13	-0.7
Oklahoma	44	44.4	39	47.5	45	3.1
Oregon	168	42.2	35	44.6	39	2.4
South Carolina	20	33.8	22	43.8	38	10.0
South Dakota	4	51.8	53	51.4	52	-0.4
Texas	1,789	38.9	29	39.6	31	0.7
Total	4,272	38.8	29	40.0	31	1.2

Grade 3

State	Number Tested	Pretest NCE	Pretest Percentile	Posttest NCE	Posttest Percentile	Gain NCE
Alabama	24	38.4	29	40.1	32	1.7
Alaska	323	31.6	19	33.7	22	2.1
California	1,247	34.9	23	37.9	28	3.0
Colorado	17	28.6	15	34.4	23	5.8
Connecticut	70	44.1	39	41.7	34	-2.4
Florida	505	32.3	20	33.0	21	0.7
Georgia	18	36.7	26	37.0	26	0.3
Idaho	68	34.4	23	37.4	27	3.0
Louisiana	230	38.8	29	40.3	32	1.5
Maine	73	49.3	48	49.8	49	0.5
Mississippi	93	40.9	33	46.0	42	5.1
Nevada	21	38.6	29	39.7	31	1.1
New Jersey	41	42.7	36	47.9	46	5.2
New Mexico	8	16.0	5	28.1	14	12.1
Oklahoma	41	44.1	39	41.8	34	-2.3
Oregon	188	41.1	33	37.4	27	-3.7
South Carolina	20	31.1	18	31.1	18	0.0
South Dakota	1	50.0	50	57.0	63	7.0
Texas	2,446	33.7	22	35.0	23	1.3
Total	5,434	34.8	23	36.4	25	1.6

Table B.1. (cont'd)

Grade 4

State	Number Tested	Pretest NCE	Pretest Percentile	Posttest NCE	Posttest Percentile	Gain NCE
Alabama	17	45.2	41	44.4	39	-0.8
Alaska	310	33.7	22	32.9	20	-0.8
California	1,314	36.3	25	39.7	31	3.4
Colorado	21	34.3	22	36.6	26	2.3
Connecticut	58	36.5	26	39.6	31	3.1
Florida	457	33.0	21	35.0	23	2.0
Georgia	13	36.1	25	40.9	33	4.8
Idaho	67	32.9	20	36.5	26	3.6
Louisiana	202	40.1	32	42.0	35	1.9
Maine	82	56.5	62	56.0	61	-0.5
Mississippi	82	40.4	32	42.5	36	2.1
Nevada	22	39.0	30	41.0	33	2.0
New Jersey	43	39.5	30	47.5	45	8.0
New Mexico	13	21.9	9	31.8	19	9.9
Oklahoma	44	41.4	34	46.1	42	4.7
Oregon	165	40.5	32	43.3	37	2.8
South Carolina	--	--	--	--	--	--
South Dakota	3	55.3	60	53.7	57	-1.6
Texas	2,462	32.1	19	33.4	21	1.3
Total	5,375	34.6	23	36.6	26	2.0

Grade 5

State	Number Tested	Pretest NCE	Pretest Percentile	Posttest NCE	Posttest Percentile	Gain NCE
Alabama	12	44.9	40	45.9	42	1.0
Alaska	293	31.8	19	32.2	19	0.4
California	1,287	35.1	24	36.3	25	1.2
Colorado	21	42.3	35	47.8	45	5.5
Connecticut	83	37.1	27	37.0	26	-0.1
Florida	457	33.2	21	34.0	22	0.8
Georgia	24	48.7	47	49.1	48	0.4
Idaho	51	38.8	29	39.7	31	0.9
Louisiana	225	41.2	33	42.5	36	1.3
Maine	68	48.9	48	51.9	53	3.0
Mississippi	82	44.5	39	45.6	41	1.1
Nevada	15	34.1	22	29.6	16	-4.5
New Jersey	36	41.1	33	46.1	42	5.0
New Mexico	6	33.3	21	34.5	23	1.2
Oklahoma	40	44.1	39	40.6	32	-3.5
Oregon	155	40.1	32	40.1	32	0.0
South Carolina	--	--	--	--	--	--
South Dakota	3	48.8	47	57.1	63	8.3
Texas	2,852	32.4	20	33.1	21	0.7
Total	5,710	34.4	23	35.2	24	0.8

Table B.1. (cont'd)

Grade 6

State	Number Tested	Pretest NCE	Pretest Percentile	Posttest NCE	Posttest Percentile	Gain NCE
Alabama	27	42.6	36	42.6	36	0.0
Alaska	273	31.8	19	30.2	17	-1.6
California	1,222	36.0	25	38.5	29	2.5
Colorado	20	33.8	22	37.7	28	3.9
Connecticut	75	35.4	24	39.4	30	4.0
Florida	387	30.8	18	33.0	21	2.2
Georgia	15	40.7	33	40.6	32	-0.1
Idaho	22	38.6	29	40.1	32	1.5
Louisiana	188	39.8	31	40.6	32	0.8
Maine	65	50.0	50	50.8	51	0.8
Mississippi	79	41.4	34	45.4	41	4.0
Nevada	6	37.1	27	30.2	17	-6.9
New Jersey	24	45.4	41	51.0	51	5.6
New Mexico	5	36.0	25	36.8	26	0.8
Oklahoma	36	36.9	26	41.0	33	4.1
Oregon	128	42.8	36	45.0	40	2.2
South Carolina	--	--	--	--	--	--
South Dakota	1	57.0	63	58.7	66	1.7
Texas	3,062	33.1	21	34.2	22	1.1
Total	5,635	34.5	23	35.9	25	1.4

Grade 7

State	Number Tested	Pretest NCE	Pretest Percentile	Posttest NCE	Posttest Percentile	Gain NCE
Alabama	36	36.2	25	36.3	25	0.1
Alaska	241	29.3	16	31.6	19	2.3
California	793	35.8	25	38.2	28	2.4
Colorado	17	45.0	40	44.7	40	-0.3
Connecticut	61	37.5	27	41.6	34	4.1
Florida	170	30.0	17	31.0	18	1.0
Georgia	17	38.9	29	37.9	28	-1.0
Idaho	13	31.2	18	37.7	28	6.5
Louisiana	150	42.2	35	43.5	37	1.3
Maine	88	45.4	41	47.9	46	2.5
Mississippi	69	38.2	28	39.8	31	1.6
Nevada	9	27.2	14	28.3	15	1.1
New Jersey	31	41.1	33	47.9	46	6.8
New Mexico	3	23.0	10	33.3	21	10.3
Oklahoma	26	34.7	23	37.4	27	2.7
Oregon	123	42.1	35	42.9	36	0.8
South Carolina	--	--	--	--	--	--
South Dakota	--	--	--	--	--	--
Texas	2,728	31.6	19	32.8	20	1.2
Total	4,575	33.4	21	35.0	23	1.6

Table B.1. (cont'd)

Grade 8

State	Number Tested	Pretest NCE	Pretest Percentile	Posttest NCE	Posttest Percentile	Gain NCE
Alabama	47	32.5	20	34.9	23	2.4
Alaska	270	31.6	19	28.8	15	-2.8
California	677	35.0	23	36.9	26	1.9
Colorado	9	38.6	29	38.4	29	-0.2
Connecticut	55	35.1	24	38.3	29	3.2
Florida	60	29.5	16	31.0	18	1.5
Georgia	14	38.8	29	38.5	29	-0.3
Idaho	5	29.4	16	26.8	13	-2.6
Louisiana	103	40.6	32	42.7	36	2.1
Maine	83	48.4	47	47.8	45	-0.6
Mississippi	41	47.6	45	48.3	46	0.7
Nevada	8	23.0	10	31.8	19	8.8
New Jersey	20	43.4	37	49.9	49	6.5
New Mexico	--	--	--	--	--	--
Oklahoma	33	44.5	39	45.1	40	0.6
Oregon	99	41.4	34	43.6	38	2.2
South Carolina	--	--	--	--	--	--
South Dakota	--	--	--	--	--	--
Texas	2,565	31.1	18	31.2	18	0.1
Total	4,089	33.0	21	33.5	21	0.5

Grade 9

State	Number Tested	Pretest NCE	Pretest Percentile	Posttest NCE	Posttest Percentile	Gain NCE
Alabama	12	35.1	24	29.3	16	-5.8
Alaska	226	29.6	16	29.1	16	-0.5
California	536	28.0	14	31.2	18	3.2
Colorado	6	34.4	23	37.0	26	2.6
Connecticut	3	25.3	12	37.7	28	12.4
Florida	--	--	--	--	--	--
Georgia	12	42.0	35	38.3	29	-3.7
Idaho	6	45.7	41	47.8	45	2.1
Louisiana	59	43.5	37	40.4	32	-3.1
Maine	10	44.7	40	56.1	61	11.4
Mississippi	13	39.6	31	35.7	24	-3.9
Nevada	--	--	--	--	--	--
New Jersey	12	34.4	23	38.8	29	4.4
New Mexico	4	42.7	36	44.5	39	1.8
Oklahoma	17	46.9	44	55.1	59	8.2
Oregon	34	42.7	36	47.6	45	4.9
South Carolina	10	25.3	12	28.2	15	2.9
South Dakota	--	--	--	--	--	--
Texas	1,572	27.6	14	29.4	16	1.8
Total	2,532	28.9	15	30.7	18	1.8

Table B.1. (cont'd)

Grade 10

State	Number Tested	Pretest NCE	Pretest Percentile	Posttest NCE	Posttest Percentile	Gain NCE
Alabama	12	33.8	22	26.5	13	-7.3
Alaska	195	28.2	15	30.4	17	2.2
California	404	29.6	16	31.7	19	2.1
Colorado	7	31.6	19	32.0	19	0.4
Connecticut	6	29.0	15	37.9	28	8.9
Florida	--	--	--	--	--	--
Georgia	--	--	--	--	--	--
Idaho	1	1.0	1	1.0	1	0.0
Louisiana	39	44.7	40	40.9	33	-3.8
Maine	23	50.3	50	52.3	54	2.0
Mississippi	7	37.4	27	35.4	24	-2.0
Nevada	--	--	--	--	--	--
New Jersey	8	40.9	33	48.0	46	7.1
New Mexico	2	35.5	24	43.5	37	8.0
Oklahoma	11	28.9	15	32.1	19	3.2
Oregon	32	38.0	28	35.7	24	-2.3
South Carolina	--	--	--	--	--	--
South Dakota	--	--	--	--	--	--
Texas	1,303	29.5	16	29.1	16	-0.4
Total	2,050	30.1	17	30.5	17	0.4

Grade 11

State	Number Tested	Pretest NCE	Pretest Percentile	Posttest NCE	Posttest Percentile	Gain NCE
Alabama	14	31.6	19	29.9	17	-1.7
Alaska	157	28.9	15	31.8	19	2.9
California	162	29.4	16	31.0	18	1.6
Colorado	--	--	--	--	--	--
Connecticut	2	39.0	30	29.9	17	-9.1
Florida	--	--	--	--	--	--
Georgia	--	--	--	--	--	--
Idaho	1	1.0	1	1.0	1	0.0
Louisiana	26	40.9	33	44.3	39	3.4
Maine	10	54.7	58	54.1	57	-0.6
Mississippi	8	24.7	11	26.6	13	1.9
Nevada	--	--	--	--	--	--
New Jersey	4	56.4	62	57.4	63	1.0
New Mexico	4	37.2	27	39.0	30	1.8
Oklahoma	14	38.3	29	36.7	26	-1.6
Oregon	24	46.4	43	45.7	41	-0.7
South Carolina	--	--	--	--	--	--
South Dakota	2	33.7	22	45.7	41	12.0
Texas	903	30.5	17	30.7	18	0.2
Total	1,331	31.0	18	31.7	19	0.7

Table B.1. (cont'd)

Grade 12

State	Number Tested	Pretest NCE	Pretest Percentile	Posttest NCE	Posttest Percentile	Gain NCE
Alabama	13	26.0	12	24.2	11	-1.8
Alaska	153	30.8	18	31.9	19	1.1
California	133	33.4	21	31.3	18	-2.1
Colorado	--	--	--	--	--	--
Connecticut	2	51.1	52	45.9	42	-5.2
Florida	--	--	--	--	--	--
Georgia	--	--	--	--	--	--
Idaho	--	--	--	--	--	--
Louisiana	2	38.5	29	41.5	34	3.0
Maine	15	42.4	35	47.9	46	5.5
Mississippi	4	39.1	30	38.3	29	-0.8
Nevada	--	--	--	--	--	--
New Jersey	5	38.2	28	40.2	32	2.0
New Mexico	--	--	--	--	--	--
Oklahoma	9	45.2	41	45.6	41	0.4
Oregon	13	40.9	33	32.4	20	-8.5
South Carolina	--	--	--	--	--	--
South Dakota	2	32.5	20	39.8	31	7.3
Texas	689	31.3	18	29.7	16	-1.6
Total	1,040	31.9	19	30.8	18	-1.1

Table B.2. Chapter 1 Migrant Education Mathematics Achievement Results for Students Tested on an Annual Schedule -- 1987-88

Kindergarten

State	Number Tested	Pretest NCE	Pretest Percentile	Posttest NCE	Posttest Percentile	Gain NCE
Alabama	--	--	--	--	--	--
Alaska	--	--	--	--	--	--
California	--	--	--	--	--	--
Colorado	--	--	--	--	--	--
Connecticut	--	--	--	--	--	--
Florida	--	--	--	--	--	--
Georgia	--	--	--	--	--	--
Idaho	--	--	--	--	--	--
Louisiana	--	--	--	--	--	--
Maine	--	--	--	--	--	--
Mississippi	1	37.7	28	50.0	50	12.3
Nevada	--	--	--	--	--	--
New Jersey	--	--	--	--	--	--
New Mexico	--	--	--	--	--	--
Oklahoma	2	16.2	5	40.0	31	23.8
Oregon	1	43.0	37	32.0	19	-11.0
South Carolina	--	--	--	--	--	--
South Dakota	--	--	--	--	--	--
Texas	--	--	--	--	--	--
Total	4	28.3	15	40.5	32	12.2

Grade 1

State	Number Tested	Pretest NCE	Pretest Percentile	Posttest NCE	Posttest Percentile	Gain NCE
Alabama	--	--	--	--	--	--
Alaska	--	--	--	--	--	--
California	--	--	--	--	--	--
Colorado	13	32.0	19	35.4	24	3.4
Connecticut	--	--	--	--	--	--
Florida	--	--	--	--	--	--
Georgia	4	28.0	14	35.8	25	7.8
Idaho	--	--	--	--	--	--
Louisiana	65	39.2	30	52.0	53	12.8
Maine	--	--	--	--	--	--
Mississippi	14	32.6	20	50.7	51	18.1
Nevada	--	--	--	--	--	--
New Jersey	--	--	--	--	--	--
New Mexico	5	34.6	23	35.0	23	0.4
Oklahoma	44	43.7	38	45.9	42	2.2
Oregon	18	27.6	14	51.9	53	24.3
South Carolina	14	31.4	18	44.1	39	12.7
South Dakota	3	44.6	39	51.9	53	7.3
Texas	--	--	--	--	--	--
Total	180	37.2	27	47.8	45	10.6

Table B.2. (cont'd)

Grade 2

State	Number Tested	Pretest NCE	Pretest Percentile	Posttest NCE	Posttest Percentile	Gain NCE
Alabama	91	48.1	46	53.3	56	5.2
Alaska	271	39.0	30	46.5	43	7.5
California	983	42.8	36	47.2	44	4.4
Colorado	12	30.3	17	38.1	28	7.8
Connecticut	5	63.0	73	54.3	58	-8.7
Florida	62	39.0	30	43.0	37	4.0
Georgia	34	37.9	28	51.7	53	13.8
Idaho	63	40.6	32	41.3	34	0.7
Louisiana	195	51.9	53	47.9	46	-4.0
Maine	49	57.5	64	57.4	63	-0.1
Mississippi	41	46.1	42	52.2	54	6.1
Nevada	18	31.3	18	33.6	21	2.3
New Jersey	23	55.6	60	57.0	63	1.4
New Mexico	11	34.4	23	41.4	34	7.0
Oklahoma	52	47.1	44	48.1	46	1.0
Oregon	166	48.1	46	51.0	51	2.9
South Carolina	20	38.4	29	53.3	56	14.9
South Dakota	4	40.6	32	49.1	48	8.5
Texas	1,039	48.9	48	51.1	52	2.2
Total	3,139	45.6	41	48.9	48	3.3

Grade 3

State	Number Tested	Pretest NCE	Pretest Percentile	Posttest NCE	Posttest Percentile	Gain NCE
Alabama	65	49.0	48	48.4	47	-0.6
Alaska	295	42.4	35	38.9	29	-3.5
California	1,094	43.5	37	45.1	40	1.6
Colorado	14	28.0	14	31.4	18	3.4
Connecticut	17	33.1	21	50.3	50	17.2
Florida	93	37.3	27	40.0	31	2.7
Georgia	35	38.9	29	34.2	22	-4.7
Idaho	40	37.6	27	39.2	30	1.6
Louisiana	190	44.1	39	47.2	44	3.1
Maine	66	50.9	51	51.2	52	0.3
Mississippi	44	43.4	37	44.6	39	1.2
Nevada	12	45.3	41	54.4	58	9.1
New Jersey	42	53.2	56	54.2	58	1.0
New Mexico	21	35.4	24	35.8	25	0.4
Oklahoma	69	43.3	37	45.4	41	2.1
Oregon	175	47.9	46	42.9	36	-5.0
South Carolina	20	27.3	14	40.1	32	12.8
South Dakota	1	44.7	40	50.5	51	5.8
Texas	1,373	49.3	48	48.6	47	-0.7
Total	3,666	45.7	41	45.8	42	0.1

Table B.2. (cont'd)

Grade 4

State	Number Tested	Pretest NCE	Pretest Percentile	Posttest NCE	Posttest Percentile	Gain NCE
Alabama	108	47.2	44	59.5	67	12.3
Alaska	302	41.2	33	37.8	28	-3.4
California	1,188	41.8	34	44.2	39	2.4
Colorado	20	34.8	23	35.6	24	0.8
Connecticut	14	37.4	27	53.8	57	16.4
Florida	74	35.0	23	39.0	30	4.0
Georgia	46	39.6	31	44.5	39	4.9
Idaho	40	39.8	31	41.1	33	1.3
Louisiana	199	44.8	40	51.6	53	6.8
Maine	79	51.9	53	54.3	58	2.4
Mississippi	54	40.3	32	44.4	39	4.1
Nevada	13	40.6	32	48.3	46	7.7
New Jersey	33	50.3	50	53.3	56	3.0
New Mexico	21	33.1	21	44.5	39	11.4
Oklahoma	70	47.1	44	44.3	39	-2.8
Oregon	144	45.8	42	48.1	46	2.3
South Carolina	--	--	--	--	--	--
South Dakota	3	37.9	28	44.2	39	6.3
Texas	1,626	44.3	39	45.0	40	0.7
Total	4,034	43.3	37	45.1	40	1.8

Grade 5

State	Number Tested	Pretest NCE	Pretest Percentile	Posttest NCE	Posttest Percentile	Gain NCE
Alabama	66	53.8	57	55.7	60	1.9
Alaska	272	35.3	24	37.1	27	1.8
California	1,167	39.8	31	43.7	38	3.9
Colorado	15	42.5	36	44.0	38	1.5
Connecticut	11	44.5	39	42.0	35	-2.5
Florida	77	36.1	25	40.0	31	3.9
Georgia	39	45.8	42	41.9	35	-3.9
Idaho	36	38.1	28	46.2	42	8.1
Louisiana	181	42.2	35	50.6	51	8.4
Maine	59	52.3	54	52.1	54	-0.2
Mississippi	48	44.3	39	44.3	39	0.0
Nevada	10	41.0	33	41.9	35	0.9
New Jersey	35	46.8	44	54.1	57	7.3
New Mexico	17	33.6	21	34.8	23	1.2
Oklahoma	71	38.1	28	42.1	35	4.0
Oregon	161	44.5	39	43.9	38	-0.6
South Carolina	--	--	--	--	--	--
South Dakota	3	44.5	39	47.1	44	2.6
Texas	1,919	42.1	35	46.0	42	3.9
Total	4,187	41.3	34	44.9	40	3.6

Table B.2. (cont'd)

Grade 6

State	Number Tested	Pretest NCE	Pretest Percentile	Posttest NCE	Posttest Percentile	Gain NCE
Alabama	84	53.9	57	51.6	53	-2.3
Alaska	266	36.0	25	37.9	28	1.9
California	1,103	41.4	34	44.2	39	2.8
Colorado	11	35.1	24	34.0	22	-1.1
Connecticut	17	40.3	32	43.9	38	3.6
Florida	66	35.6	24	39.0	30	3.4
Georgia	14	38.9	29	34.5	23	-4.4
Idaho	30	40.6	32	42.0	35	1.4
Louisiana	169	43.6	38	45.8	42	2.2
Maine	69	48.0	46	49.9	49	1.9
Mississippi	35	41.1	33	42.0	35	0.9
Nevada	10	29.2	16	44.5	39	15.3
New Jersey	22	44.1	39	51.3	52	7.2
New Mexico	13	28.9	15	30.2	17	1.3
Oklahoma	44	36.8	26	41.8	34	5.0
Oregon	115	49.9	49	50.4	50	0.5
South Carolina	--	--	--	--	--	--
South Dakota	1	56.4	62	59.3	67	2.9
Texas	1,685	47.6	45	48.8	47	1.2
Total	3,754	44.3	39	46.1	42	1.8

Grade 7

State	Number Tested	Pretest NCE	Pretest Percentile	Posttest NCE	Posttest Percentile	Gain NCE
Alabama	37	31.2	18	36.7	26	5.5
Alaska	252	35.7	24	37.9	28	2.2
California	705	41.3	34	44.1	39	2.8
Colorado	13	32.5	20	38.3	29	5.8
Connecticut	10	42.4	35	45.6	41	3.2
Florida	88	34.3	22	39.0	30	4.7
Georgia	17	37.7	28	40.5	32	2.8
Idaho	10	37.0	26	31.0	18	-6.0
Louisiana	122	49.1	48	48.8	47	-0.3
Maine	86	45.5	41	49.3	48	3.8
Mississippi	26	44.1	39	44.0	38	-0.1
Nevada	9	29.9	17	32.9	20	3.0
New Jersey	26	51.2	52	54.6	58	3.4
New Mexico	6	28.5	15	29.7	16	1.2
Oklahoma	28	39.4	30	41.5	34	2.1
Oregon	122	50.2	50	48.3	46	-1.9
South Carolina	--	--	--	--	--	--
South Dakota	--	--	--	--	--	--
Texas	1,211	41.4	34	41.8	34	0.4
Total	2,768	41.3	34	42.7	36	1.4

Table B.2. (cont'd)

Grade 8

State	Number Tested	Pretest NCE	Pretest Percentile	Posttest NCE	Posttest Percentile	Gain NCE
Alabama	26	32.0	19	31.3	18	-0.7
Alaska	284	35.8	25	36.3	25	0.5
California	591	43.6	38	43.9	38	0.3
Colorado	7	40.3	32	44.4	39	4.1
Connecticut	9	53.9	57	54.2	58	0.3
Florida	27	34.4	23	39.0	30	4.6
Georgia	16	36.7	26	39.4	30	2.7
Idaho	4	30.3	17	22.8	9	-7.5
Louisiana	93	49.7	49	48.6	47	-1.1
Maine	75	45.7	41	46.3	43	0.6
Mississippi	15	47.1	44	50.6	51	3.5
Nevada	8	31.6	19	42.2	35	10.6
New Jersey	14	56.4	62	58.2	65	1.8
New Mexico	7	29.2	16	35.9	25	6.7
Oklahoma	31	47.4	45	44.8	40	-2.6
Oregon	95	47.6	45	48.5	47	0.9
South Carolina	--	--	--	--	--	--
South Dakota	--	--	--	--	--	--
Texas	1,129	40.2	32	39.7	31	-0.5
Total	2,431	41.4	34	41.4	34	0.0

Grade 9

State	Number Tested	Pretest NCE	Pretest Percentile	Posttest NCE	Posttest Percentile	Gain NCE
Alabama	17	40.4	32	40.0	31	-0.4
Alaska	214	31.4	18	33.4	21	2.0
California	463	37.5	27	39.0	30	1.5
Colorado	8	34.6	23	32.5	20	-2.1
Connecticut	1	27.2	14	30.7	18	3.5
Florida	--	--	--	--	--	--
Georgia	3	22.7	9	37.7	28	15.0
Idaho	4	54.2	58	68.0	80	13.8
Louisiana	57	55.2	59	54.5	58	-0.7
Maine	6	38.3	29	53.7	57	15.4
Mississippi	3	41.0	33	47.0	44	6.0
Nevada	--	--	--	--	--	--
New Jersey	12	40.3	32	50.1	50	9.8
New Mexico	12	36.5	26	39.8	31	3.3
Oklahoma	13	57.3	63	61.7	71	4.4
Oregon	34	43.2	37	47.5	45	4.3
South Carolina	10	41.9	35	64.2	75	22.3
South Dakota	--	--	--	--	--	--
Texas	856	36.6	26	39.0	30	2.4
Total	1,713	37.2	27	39.5	30	2.3

Table B.2. (cont'd)

Grade 10

State	Number Tested	Pretest NCE	Pretest Percentile	Posttest NCE	Posttest Percentile	Gain NCE
Alabama	22	38.4	29	39.6	31	1.2
Alaska	193	32.1	19	35.0	23	2.9
California	353	39.9	31	42.3	35	2.4
Colorado	4	29.2	16	34.2	22	5.0
Connecticut	3	15.0	4	52.0	53	37.0
Florida	--	--	--	--	--	--
Georgia	3	50.7	51	40.7	33	-10.0
Idaho	1	46.0	42	42.0	35	-4.0
Louisiana	36	48.8	47	58.0	64	9.2
Maine	24	42.8	36	47.2	44	4.4
Mississippi	2	29.5	16	37.0	26	7.5
Nevada	--	--	--	--	--	--
New Jersey	6	45.2	41	51.9	53	6.7
New Mexico	1	32.0	19	30.0	17	-2.0
Oklahoma	11	40.3	32	43.9	38	3.6
Oregon	32	46.4	43	44.3	39	-2.1
South Carolina	--	--	--	--	--	--
South Dakota	--	--	--	--	--	--
Texas	483	36.9	26	39.9	31	3.0
Total	1,174	37.8	28	40.7	33	2.9

Grade 11

State	Number Tested	Pretest NCE	Pretest Percentile	Posttest NCE	Posttest Percentile	Gain NCE
Alabama	3	40.5	32	32.0	19	-8.5
Alaska	155	33.7	22	36.0	25	2.3
California	138	39.6	31	39.9	31	0.3
Colorado	--	--	--	--	--	--
Connecticut	1	17.0	5	62.0	71	45.0
Florida	--	--	--	--	--	--
Georgia	--	--	--	--	--	--
Idaho	--	--	--	--	--	--
Louisiana	17	53.5	56	54.4	58	0.9
Maine	20	42.5	36	44.4	39	1.9
Mississippi	2	45.0	40	39.0	30	-6.0
Nevada	--	--	--	--	--	--
New Jersey	4	52.2	54	60.7	69	8.5
New Mexico	--	--	--	--	--	--
Oklahoma	17	42.4	35	42.2	35	-0.2
Oregon	23	47.4	45	43.7	38	-3.7
South Carolina	--	--	--	--	--	--
South Dakota	2	51.6	53	57.0	63	5.4
Texas	311	37.8	28	39.5	30	1.7
Total	693	38.3	29	39.7	31	1.4

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Table B.2. (cont'd)

Grade 12

State	Number Tested	Pretest NCE	Pretest Percentile	Posttest NCE	Posttest Percentile	Gain NCE
Alabama	--	--	--	--	--	--
Alaska	152	35.5	24	35.9	25	0.4
California	105	41.5	34	40.7	33	-0.8
Colorado	--	--	--	--	--	--
Connecticut	--	--	--	--	--	--
Florida	--	--	--	--	--	--
Georgia	--	--	--	--	--	--
Idaho	--	--	--	--	--	--
Louisiana	2	41.0	33	45.5	41	4.5
Maine	10	46.4	43	46.6	43	0.2
Mississippi	1	75.0	88	61.0	70	-14.0
Nevada	--	--	--	--	--	--
New Jersey	5	39.1	30	49.8	49	10.7
New Mexico	--	--	--	--	--	--
Oklahoma	9	44.1	39	43.9	38	-0.2
Oregon	13	40.5	32	43.7	38	3.2
South Carolina	--	--	--	--	--	--
South Dakota	2	33.5	21	40.8	33	7.3
Texas	180	40.4	32	41.6	34	1.2
Total	479	39.3	30	39.9	31	0.6

Table B.3. Chapter 1 Migrant Education Reading Achievement Results for Students Tested on a Fall-Spring Schedule -- 1987-88

Kindergarten

State	Number Tested	Pretest NCE	Pretest Percentile	Posttest NCE	Posttest Percentile	Gain NCE
Alabama	--	--	--	--	--	--
Arkansas	--	--	--	--	--	--
Colorado	14	39.3	30	44.0	38	4.7
Connecticut	--	--	--	--	--	--
Idaho	--	--	--	--	--	--
Louisiana	--	--	--	--	--	--
Maine	--	--	--	--	--	--
Mississippi	3	41.3	34	41.0	33	-0.3
Nevada	--	--	--	--	--	--
New Jersey	--	--	--	--	--	--
Oklahoma	17	52.3	54	47.7	45	-4.6
Total	34	46.0	42	45.6	41	-0.4

Grade 1

State	Number Tested	Pretest NCE	Pretest Percentile	Posttest NCE	Posttest Percentile	Gain NCE
Alabama	--	--	--	--	--	--
Arkansas	--	--	--	--	--	--
Colorado	47	45.0	40	47.2	44	2.2
Connecticut	--	--	--	--	--	--
Idaho	--	--	--	--	--	--
Louisiana	68	42.2	35	50.7	51	8.5
Maine	102	33.3	21	51.3	52	18.0
Mississippi	13	39.7	31	54.5	58	14.8
Nevada	--	--	--	--	--	--
New Jersey	--	--	--	--	--	--
Oklahoma	31	37.3	27	45.3	41	8.0
Total	261	38.5	29	49.9	49	11.4

Table B.3. (cont'd)

Grade 2

State	Number Tested	Pretest NCE	Pretest Percentile	Posttest NCE	Posttest Percentile	Gain NCE
Alabama	27	44.7	40	52.6	55	7.9
Arkansas	271	29.0	15	48.0	46	19.0
Colorado	54	34.9	23	41.2	33	6.3
Connecticut	29	29.4	16	32.1	19	2.7
Idaho	50	35.0	23	43.4	37	8.4
Louisiana	95	34.9	23	40.1	32	5.2
Maine	41	47.8	45	51.5	52	3.7
Mississippi	29	35.7	24	49.6	49	13.9
Nevada	4	44.5	39	44.7	40	0.2
New Jersey	29	30.4	17	32.2	19	1.8
Oklahoma	19	39.9	31	45.1	40	5.2
Total	648	33.5	21	44.9	40	11.4

Grade 3

State	Number Tested	Pretest NCE	Pretest Percentile	Posttest NCE	Posttest Percentile	Gain NCE
Alabama	29	36.5	26	43.0	37	6.5
Arkansas	213	26.0	12	39.0	30	13.0
Colorado	54	38.3	29	43.9	38	5.6
Connecticut	25	24.7	11	34.7	23	10.0
Idaho	25	32.6	20	35.4	24	2.8
Louisiana	85	33.5	21	38.8	29	5.3
Maine	58	47.5	45	55.2	59	7.7
Mississippi	32	35.2	24	40.8	33	5.6
Nevada	3	66.3	78	44.0	38	-22.3
New Jersey	29	35.2	24	36.5	26	1.3
Oklahoma	14	32.2	19	38.7	29	6.5
Total	567	32.6	20	40.9	33	8.3

Table B.3. (cont'd)

Grade 4

State	Number Tested	Pretest NCE	Pretest Percentile	Posttest NCE	Posttest Percentile	Gain NCE
Alabama	35	30.7	18	35.1	24	4.4
Arkansas	240	34.0	22	43.0	37	9.0
Colorado	52	34.6	23	41.0	33	6.4
Connecticut	7	31.4	18	37.7	28	6.3
Idaho	29	32.7	20	41.0	33	8.3
Louisiana	107	37.5	27	39.3	30	1.8
Maine	56	48.2	46	52.7	55	4.5
Mississippi	45	33.8	22	40.6	32	6.8
Nevada	1	13.1	4	15.4	5	2.3
New Jersey	30	31.2	18	42.4	35	11.2
Oklahoma	8	41.8	34	49.4	48	7.6
Total	610	35.6	24	42.3	35	6.7

Grade 5

State	Number Tested	Pretest NCE	Pretest Percentile	Posttest NCE	Posttest Percentile	Gain NCE
Alabama	36	35.8	25	44.7	40	8.9
Arkansas	215	27.0	13	36.0	25	9.0
Colorado	29	34.3	22	38.8	29	4.5
Connecticut	13	32.4	20	37.0	26	4.6
Idaho	33	29.2	16	37.8	28	8.6
Louisiana	116	38.8	29	40.6	32	1.8
Maine	46	47.6	45	55.1	59	7.5
Mississippi	45	33.7	22	37.3	27	3.6
Nevada	3	46.1	42	42.6	36	-3.5
New Jersey	24	42.3	35	40.4	32	-1.9
Oklahoma	12	34.0	22	37.6	27	3.6
Total	572	33.6	21	39.6	31	6.0

Table B.3. (cont'd)

Grade 6

State	Number Tested	Pretest NCE	Pretest Percentile	Posttest NCE	Posttest Percentile	Gain NCE
Alabama	29	40.7	33	47.4	45	6.7
Arkansas	153	35.0	23	44.0	38	9.0
Colorado	22	37.1	27	40.2	32	3.1
Connecticut	11	39.9	31	43.3	37	3.4
Idaho	38	34.4	23	36.1	25	1.7
Louisiana	86	37.6	27	36.7	26	-0.9
Maine	32	49.6	49	49.0	48	-0.6
Mississippi	39	32.4	20	38.8	29	6.4
Nevada	6	39.8	31	53.1	55	13.3
New Jersey	29	37.3	27	43.5	37	6.2
Oklahoma	14	34.5	23	38.6	29	4.1
Total	459	37.0	26	41.8	34	4.8

Grade 7

State	Number Tested	Pretest NCE	Pretest Percentile	Posttest NCE	Posttest Percentile	Gain NCE
Alabama	27	55.9	61	58.1	65	2.2
Arkansas	57	30.0	17	43.0	37	13.0
Colorado	20	36.4	25	40.1	32	3.7
Connecticut	3	34.8	23	44.4	39	9.6
Idaho	12	40.1	32	36.8	26	-3.3
Louisiana	52	45.8	42	49.9	49	4.1
Maine	27	50.6	51	51.9	53	1.3
Mississippi	44	14.0	4	26.7	13	12.7
Nevada	6	40.8	33	42.3	35	1.5
New Jersey	17	31.1	18	34.8	23	3.7
Oklahoma	5	32.6	20	50.5	51	17.9
Total	270	36.4	25	43.2	37	6.8

Table B.3. (cont'd)

Grade 8

State	Number Tested	Pretest NCE	Pretest Percentile	Posttest NCE	Posttest Percentile	Gain NCE
Alabama	24	33.0	21	41.9	35	8.9
Arkansas	37	35.0	23	42.0	35	7.0
Colorado	17	27.2	14	38.2	28	11.0
Connecticut	7	27.2	14	29.9	17	2.7
Idaho	14	19.7	7	25.4	12	5.7
Louisiana	47	37.8	28	40.7	33	2.9
Maine	43	50.0	50	53.0	55	3.0
Mississippi	24	22.4	9	28.4	15	6.0
Nevada	3	40.2	32	43.7	38	3.5
New Jersey	25	24.9	11	28.8	15	3.9
Oklahoma	--	--	--	--	--	--
Total	241	34.1	22	39.4	30	5.3

Grade 9

State	Number Tested	Pretest NCE	Pretest Percentile	Posttest NCE	Posttest Percentile	Gain NCE
Alabama	5	55.3	60	54.2	58	-1.1
Arkansas	--	--	--	--	--	--
Colorado	11	26.8	13	23.9	10	-2.9
Connecticut	--	--	--	--	--	--
Idaho	6	25.9	12	39.0	30	13.1
Louisiana	--	--	--	--	--	--
Maine	25	43.7	38	50.6	51	6.9
Mississippi	15	28.1	14	30.8	18	2.7
Nevada	9	26.8	13	41.3	34	14.5
New Jersey	7	24.6	11	36.1	25	11.5
Oklahoma	1	33.0	21	48.4	47	15.4
Total	79	34.0	22	40.1	32	6.1

Table B.3. (cont'd)

Grade 10

State	Number Tested	Pretest NCE	Pretest Percentile	Posttest NCE	Posttest Percentile	Gain NCE
Alabama	3	21.8	9	35.1	24	13.3
Arkansas	--	--	--	--	--	--
Colorado	2	33.7	22	44.8	40	11.1
Connecticut	2	7.0	2	10.0	2	3.0
Idaho	--	--	--	--	--	--
Louisiana	--	--	--	--	--	--
Maine	36	46.3	43	50.7	51	4.4
Mississippi	8	34.0	22	35.0	23	1.0
Nevada	4	63.7	74	62.9	73	-0.8
New Jersey	10	26.8	13	29.8	16	3.0
Oklahoma	--	--	--	--	--	--
Total	65	40.1	32	44.1	39	4.0

Grade 11

State	Number Tested	Pretest NCE	Pretest Percentile	Posttest NCE	Posttest Percentile	Gain NCE
Alabama	8	50.5	51	54.8	59	4.3
Arkansas	--	--	--	--	--	--
Colorado	2	35.0	23	41.1	33	6.1
Connecticut	--	--	--	--	--	--
Idaho	--	--	--	--	--	--
Louisiana	--	--	--	--	--	--
Maine	31	45.7	41	51.1	52	5.4
Mississippi	7	23.0	10	24.0	10	1.0
Nevada	3	40.8	33	43.8	38	3.0
New Jersey	3	11.7	3	27.1	13	15.4
Oklahoma	--	--	--	--	--	--
Total	54	40.9	33	46.0	42	5.1

Table B.3. (cont'd)

Grade 12

State	Number Tested	Pretest NCE	Pretest Percentile	Posttest NCE	Posttest Percentile	Gain NCE
Alabama	4	13.1	4	42.5	36	29.4
Arkansas	--	--	--	--	--	--
Colorado	--	--	--	--	--	--
Connecticut	2	1.0	1	10.0	2	9.0
Idaho	--	--	--	--	--	--
Louisiana	--	--	--	--	--	--
Maine	59	51.7	53	56.8	62	5.1
Mississippi	1	33.0	21	33.0	21	0.0
Nevada	1	23.0	10	13.1	4	-9.9
New Jersey	1	24.0	10	39.0	30	15.0
Oklahoma	--	--	--	--	--	--
Total	68	46.8	44	53.3	56	6.5

Table B.4. Chapter 1 Migrant Education Mathematics Achievement Results for Students Tested on a Fall-Spring Schedule -- 1987-88

Kindergarten

State	Number Tested	Pretest NCE	Pretest Percentile	Posttest NCE	Posttest Percentile	Gain NCE
Alabama	--	--	--	--	--	--
Arkansas	--	--	--	--	--	--
Colorado	7	39.0	30	29.9	17	-9.1
Connecticut	--	--	--	--	--	--
Idaho	--	--	--	--	--	--
Louisiana	--	--	--	--	--	--
Maine	--	--	--	--	--	--
Mississippi	3	47.7	45	30.0	17	-17.7
Nevada	--	--	--	--	--	--
New Jersey	--	--	--	--	--	--
New Mexico	--	--	--	--	--	--
Oklahoma	23	37.1	27	43.6	38	6.5
Total	33	38.5	29	39.5	30	1.0

Grade 1

State	Number Tested	Pretest NCE	Pretest Percentile	Posttest NCE	Posttest Percentile	Gain NCE
Alabama	--	--	--	--	--	--
Arkansas	--	--	--	--	--	--
Colorado	44	37.2	27	40.8	33	3.6
Connecticut	--	--	--	--	--	--
Idaho	--	--	--	--	--	--
Louisiana	45	45.5	41	55.0	59	9.5
Maine	49	45.5	41	48.8	47	3.3
Mississippi	10	54.3	58	59.2	66	4.9
Nevada	--	--	--	--	--	--
New Jersey	--	--	--	--	--	--
New Mexico	--	--	--	--	--	--
Oklahoma	33	36.0	25	47.0	44	11.0
Total	181	42.2	35	48.6	47	6.4

Table B.4. (cont'd)

Grade 2

State	Number Tested	Pretest NCE	Pretest Percentile	Posttest NCE	Posttest Percentile	Gain NCE
Alabama	33	53.6	56	61.6	70	8.0
Arkansas	187	39.0	30	62.0	71	23.0
Colorado	47	37.9	28	44.6	39	6.7
Connecticut	9	34.0	22	44.0	38	10.0
Idaho	22	39.6	31	47.8	45	8.2
Louisiana	80	43.5	37	46.8	44	3.3
Maine	35	47.3	44	52.4	54	5.1
Mississippi	23	56.4	62	53.1	55	-3.3
Nevada	3	12.0	3	26.1	12	14.1
New Jersey	27	37.0	26	47.5	45	10.5
New Mexico	14	32.9	20	33.3	21	0.4
Oklahoma	27	38.7	29	48.3	46	9.6
Total	507	41.4	34	53.5	56	12.1

Grade 3

State	Number Tested	Pretest NCE	Pretest Percentile	Posttest NCE	Posttest Percentile	Gain NCE
Alabama	33	45.3	41	44.6	39	-0.7
Arkansas	144	45.0	40	58.0	64	13.0
Colorado	40	39.6	31	43.3	37	3.7
Connecticut	2	26.0	12	48.0	46	22.0
Idaho	24	34.0	22	33.9	22	-0.1
Louisiana	77	37.0	26	45.3	41	8.3
Maine	36	44.3	39	53.4	56	9.1
Mississippi	21	40.1	32	44.5	39	4.4
Nevada	--	--	--	--	--	--
New Jersey	31	36.6	26	56.6	62	20.0
New Mexico	5	39.6	31	44.2	39	4.6
Oklahoma	21	32.0	19	43.8	38	11.8
Total	434	40.8	33	50.0	50	9.2

Table B.4. (cont'd)

Grade 4

State	Number Tested	Pretest NCE	Pretest Percentile	Posttest NCE	Posttest Percentile	Gain NCE
Alabama	35	46.4	43	55.1	59	8.7
Arkansas	165	43.0	37	54.0	57	11.0
Colorado	39	36.5	26	45.5	41	9.0
Connecticut	1	37.0	26	54.0	57	17.0
Idaho	28	33.2	21	40.8	33	7.6
Louisiana	83	42.7	36	50.9	51	8.2
Maine	30	45.4	41	52.2	54	6.8
Mississippi	33	39.9	31	49.9	49	10.0
Nevada	--	--	--	--	--	--
New Jersey	28	37.7	28	52.2	54	14.5
New Mexico	11	33.0	21	46.2	42	13.2
Oklahoma	19	40.7	33	43.3	37	2.6
Total	472	41.4	34	50.9	51	9.5

Grade 5

State	Number Tested	Pretest NCE	Pretest Percentile	Posttest NCE	Posttest Percentile	Gain NCE
Alabama	41	42.3	35	45.9	42	3.6
Arkansas	157	36.0	25	48.0	46	12.0
Colorado	30	41.9	35	51.5	52	9.6
Connecticut	--	--	--	--	--	--
Idaho	19	40.1	32	45.1	40	5.0
Louisiana	97	37.3	27	46.7	43	9.4
Maine	30	51.5	52	52.7	55	1.2
Mississippi	28	40.9	33	48.1	46	7.2
Nevada	2	38.0	28	48.7	47	10.7
New Jersey	24	42.9	36	51.9	53	9.0
New Mexico	9	27.9	14	42.3	35	14.4
Oklahoma	16	31.3	18	37.3	27	6.0
Total	453	35.0	23	43.5	37	8.5

Table B.4. (cont'd)

Grade 6

State	Number Tested	Pretest NCE	Pretest Percentile	Posttest NCE	Posttest Percentile	Gain NCE
Alabama	31	46.6	43	50.8	51	4.2
Arkansas	113	37.0	26	45.0	40	8.0
Colorado	26	46.8	44	52.0	53	5.2
Connecticut	1	43.0	37	57.0	63	14.0
Idaho	36	33.1	21	41.5	34	8.4
Louisiana	74	42.2	35	48.2	46	6.0
Maine	22	47.5	45	49.0	48	1.5
Mississippi	19	44.9	40	51.3	52	6.4
Nevada	3	24.7	11	34.0	22	9.3
New Jersey	27	39.5	30	51.1	52	11.6
New Mexico	9	32.7	20	30.1	17	-2.6
Oklahoma	22	32.1	19	40.4	32	8.3
Total	383	40.3	32	46.9	44	6.6

Grade 7

State	Number Tested	Pretest NCE	Pretest Percentile	Posttest NCE	Posttest Percentile	Gain NCE
Alabama	30	54.1	57	49.6	49	-4.5
Arkansas	43	38.0	28	53.0	55	15.0
Colorado	21	41.3	34	43.6	38	2.3
Connecticut	--	--	--	--	--	--
Idaho	10	47.9	46	42.6	36	-5.3
Louisiana	53	46.6	43	50.4	50	3.8
Maine	18	43.4	37	48.3	46	4.9
Mississippi	37	33.3	21	35.1	24	1.8
Nevada	4	33.9	22	43.4	37	9.5
New Jersey	16	40.0	31	43.6	38	3.6
New Mexico	4	43.2	37	49.0	48	5.8
Oklahoma	5	50.9	51	63.4	73	12.5
Total	241	42.7	36	47.0	44	4.3

Table B.4. (cont'd)

Grade 8

State	Number Tested	Pretest NCE	Pretest Percentile	Posttest NCE	Posttest Percentile	Gain NCE
Alabama	27	34.2	22	36.8	26	2.6
Arkansas	41	36.0	25	51.0	51	15.0
Colorado	9	39.0	30	40.6	32	1.6
Connecticut	--	--	--	--	--	--
Idaho	3	40.0	31	52.7	55	12.7
Louisiana	42	44.3	39	45.9	42	1.6
Maine	29	51.7	53	50.3	50	-1.4
Mississippi	17	32.0	19	40.1	32	8.1
Nevada	2	24.1	10	39.1	30	15.0
New Jersey	20	40.1	32	48.7	47	8.6
New Mexico	4	32.0	19	45.5	41	13.5
Oklahoma	6	38.1	28	46.3	43	8.2
Total	200	39.9	31	45.9	42	6.0

Grade 9

State	Number Tested	Pretest NCE	Pretest Percentile	Posttest NCE	Posttest Percentile	Gain NCE
Alabama	6	40.4	32	44.3	39	3.9
Arkansas	--	--	--	--	--	--
Colorado	7	36.4	25	45.1	40	8.7
Connecticut	5	23.0	10	29.0	15	6.0
Idaho	5	12.4	3	16.4	5	4.0
Louisiana	19	45.2	41	52.9	55	7.7
Maine	21	38.5	29	43.3	37	4.8
Mississippi	10	32.6	20	39.0	30	6.4
Nevada	1	39.6	31	46.3	43	6.7
New Jersey	4	35.0	23	43.8	38	8.8
New Mexico	6	37.8	28	35.8	25	-2.0
Oklahoma	5	35.7	24	52.0	53	16.3
Total	89	36.5	26	42.8	36	6.3

Table B.4. (cont'd)

Grade 10

State	Number Tested	Pretest NCE	Pretest Percentile	Posttest NCE	Posttest Percentile	Gain NCE
Alabama	4	30.6	17	38.1	28	7.5
Arkansas	--	--	--	--	--	--
Colorado	2	54.0	57	54.0	57	0.0
Connecticut	--	--	--	--	--	--
Idaho	--	--	--	--	--	--
Louisiana	14	66.9	78	70.9	84	4.0
Maine	24	48.5	47	51.2	52	2.7
Mississippi	8	47.3	44	41.3	34	-6.0
Nevada	4	69.2	81	64.0	74	-5.2
New Jersey	12	35.2	24	40.5	32	5.3
New Mexico	6	37.4	27	41.2	33	3.8
Oklahoma	3	38.7	29	32.0	19	-6.7
Total	77	48.7	47	50.6	51	1.9

Grade 11

State	Number Tested	Pretest NCE	Pretest Percentile	Posttest NCE	Posttest Percentile	Gain NCE
Alabama	8	60.4	69	53.2	56	-7.2
Arkansas	--	--	--	--	--	--
Colorado	1	36.0	25	19.0	7	-17.0
Connecticut	--	--	--	--	--	--
Idaho	--	--	--	--	--	--
Louisiana	14	78.7	91	86.1	95	7.4
Maine	17	45.9	42	47.6	45	1.7
Mississippi	7	34.5	23	34.4	23	-0.1
Nevada	1	65.6	77	73.7	87	8.1
New Jersey	5	19.0	7	29.4	16	10.4
New Mexico	2	29.5	16	32.5	20	3.0
Oklahoma	4	29.0	15	36.5	26	7.5
Total	59	50.5	51	53.1	55	2.6

Table B.4. (cont'd)

Grade 12

State	Number Tested	Pretest NCE	Pretest Percentile	Posttest NCE	Posttest Percentile	Gain NCE
Alabama	4	0.0	0	43.6	38	43.6
Arkansas	--	--	--	--	--	--
Colorado	--	--	--	--	--	--
Connecticut	--	--	--	--	--	--
Idaho	1	6.0	1	7.0	2	1.0
Louisiana	5	66.0	77	70.0	82	4.0
Maine	3	33.7	22	38.0	28	4.3
Mississippi	1	39.0	30	55.0	59	16.0
Nevada	1	30.0	17	31.5	19	1.5
New Jersey	1	24.0	10	46.0	42	22.0
New Mexico	1	46.0	42	47.0	44	1.0
Oklahoma	3	39.6	31	47.3	44	7.7
Total	20	34.7	23	48.3	46	13.6

APPENDIX C -- A DESCRIPTION OF NORM-REFERENCED AND CRITERION-REFERENCED TESTING

NORM-REFERENCED TESTS[1]

Norm-referenced tests (NRTs) are commonly used in evaluating educational treatments because these tests provide the evaluator with a kind of quasi-control or comparison group. An NRT is one that has been given to a group of individuals (or a representative sample from the group) in order to establish test score norms for the group. The norms reflect the distribution of scores made by the individuals in the norming sample on each part of the test.

Any test for which normative data have been collected can be considered an NRT. Usually, however, the term refers to commercially published achievement tests. The major publishers collect test scores from nationally representative samples of students and provide the test user with tables of means, standard deviations, and other properties of the norm-group score distributions. Alternatively, a state, school district, or other agency may collect test scores from local students and calculate the norms for this group. In any case, the scores of the norm group provide standards against which various treatment groups can be compared.

CRITERION-REFERENCED TESTS[2]

Criterion-referenced tests (CRTs) are often used for diagnostic and prescriptive purposes. As such, they should be highly focused on clearly defined curriculum or learning units. An ancillary objective for this type of instrument is that the test items relating to each learning unit should discriminate maximally between students who have been instructed in the area and those who have not. Test items should not be selected because they discriminate among pupils at any one point in time (the general practice in norm-referenced test development).

Several different types of criterion-referenced tests are available. There is a continuum of criterion-referenced tests which ranges from those which appear to be quite similar to norm-referenced tests to those which are very different. At the former extreme are prepackaged instruments with different levels suitable for students at different grade or achievement levels. Such tests are usually organized and scored by objective, but it is common practice to administer the entire instrument both as a pretest and as a posttest regardless of whether or not all of the objectives in the test were covered in the instructional treatment.

At the other extreme are build-your-own types of instruments where groups of items are provided by objective. These groups of items may be referred to as mini-tests. The teacher (or evaluator) can then construct a "maxi-test" which exactly matches a particular program of instruction by assembling the mini-tests which correspond to the objectives taught. With this type of instrument, individual objectives or small groups of objectives are usually posttested shortly after instruction on them has been completed. Presumably, once mastery of an objective has been demonstrated, no further testing of it is required.

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[1]From Fagon, Barbara M., and Donald P. Horst. "Selecting a Norm-Referenced Test: ESEA Title I Evaluation and Reporting System." RMC Research Corporation, Mountain View, California, 1976.

[2]From Tallmadge, Kasten G. "Criterion-Referenced Tests: ESEA Title I Evaluation and Reporting System." RMC Research Corporation, Mountain View, California, 1976.

*U.S. Government Printing Office: 1991 — 293-748